November 1957.

Report

Foodgrains

Enquiry Committee

REPORT

OF THE

FOODGRAINS ENQUIRY COMMITTEE

1957

MINISTRY OF FOOD & AGRICULTURE (DEPARTMENT OF FOOD)
GOVERNMENT OF INDIA

D.O. No. F.1.11/57-FEC.

FOODGRAINS ENQUIRY COMMITTEE

MINISTRY OF FOOD & AGRICULTURE,

GOVERNMENT OF INDIA,

New Delhi, November 4, 1957.

Dear Shri Ghosh,

The Report of the Foodgrains Enquiry Committee, appointed under Government of India Resolution No. 158-(1)/57-PYI, dated 24th June 1957, is submitted herewith.

Yours sincerely,

ASOKA MEHTA

Shri B. B. Ghosh,
Secretary,
Ministry of Food & Agriculture,
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NEW DELHI.

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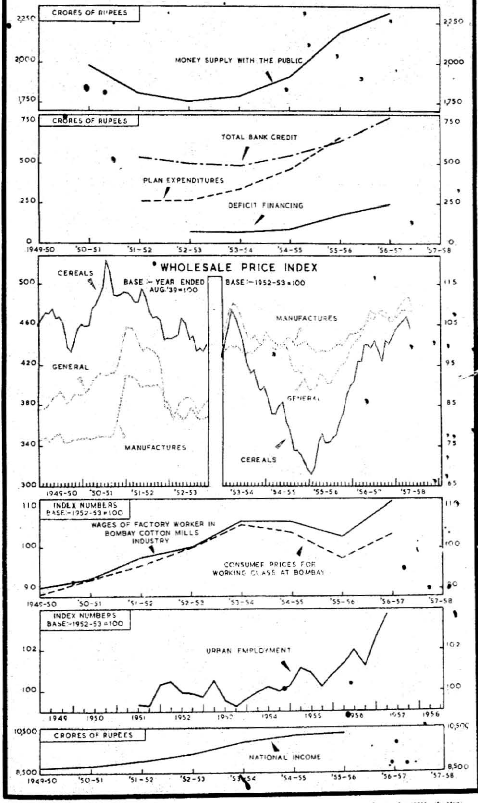
CHART I

SELECTED ECONOMIC INDICATORS



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CHAPTER I

INTRODUCTORY

Appointment of the Committee.

1.1 In the course of a statement made in the Lok Sabha on the 14th May, 1957, on the food situation, the Minister for Food and Agriculture announced: "The Government have come to the conclusion that the whole question requires thorough investigation and have decided to set up a high-powered Committee to investigate fully into the causes of rise in prices despite higher production and to suggest immediately and from time to time remedial measures which would prevent speculative hoarding and arrest undue rise in prices." It was in accordance with this announcement that the present Committee was constituted under the Government of India Resolution No. 158(1)/57-PY.I, dated the 24th June, 1957 (See Appendix I).

Terms of reference.

1.2 The terms of reference of the Committee were as follows:

(i) to review the present food situation and to examine the causes of the rising trend of food prices since about the middle of 1955;

(ii) to assess the likely trends in demand and availability of foodgrains over the next few years, taking into account

(a) the steps taken and those proposed to be taken under the Second Five Year Plan by the Central and the State Governments to increase food production,

(b) the impact of growing development expenditure, increase in population and urbanisation, on the demand for marketable surpluses,

(c) availability of foodgrains from abroad in relation to requirements and in the light of the foreign exchange position; and

(iii) to make recommendations to ensure a level of prices which would provide the necessary incentive to the producer with due regard to the interest of the consumer and the maintenance of a reasonable cost structure in the economy.

1.3 Subsequently on the 19th September, 1957 the Minister requested the Committee also to examine the problem of the areas where the food problem had been one of recurring nature and pay more attention to the food problem of the eastern U.P. (See Appendix II).

Co-operation received.

1.4 The task given to us was a formidable one while the time available was very short. It was clear to us from the outset that we would need a great deal of help and co-operation from all concerned if we were to carry out our assignment. For that reason we called on a large number of people, official as well as non-official, in almost every walk of life for assistance. The response to our appeals was most generous. A number of organisations and individuals have submitted memoranda to us based upon considerable thought and labour besides giving oral evidence before us. All these have proved to be of invaluable help to us in reaching our conclusions. In fact we have been greatly impressed by the wide public interest that has been shown in our enquiry. The Press, in particular, has been very helpful to us. Some of the newspapers not only gave wide publicity to our questionnaire but also carried out public opinion surveys on the basis of the questionnaire and submitted the results for our guidance.

Programme of work.

1.5 We held our first meeting on the 8th and 9th July, 1957 when we discussed the plan of our work. It was decided at this meeting to issue a questionnaire (See Appendix III) which was sent to State Governments, Members of Parliament and State Legislatures, important political parties, organisations of farmers, consumers, labourers, traders and industrialists as also eminent public men and economists. We also decided to approach a number of research institutes and other organisations, *e.g.*, Agro-Economic Research Centres of the Madras University, Visva Bharati University, Gokhale Institute of Politics and Economics and Delhi School of Economics, Indian Statistical Institute, Directorate of National Sample Survey, National Council of Applied Economic Research, Research Department of the Reserve Bank of India, State Bank of India, Regulated Market Committees, Programme Evaluation Organisation of the Planning Commission, Farm Management Research Centres, Directorate of Marketing and Inspection and Directorate of Economics and Statistics of the Ministry of Food and Agriculture for collecting certain relevant information about recent trends in production, marketed surplus, consumption and prices through their field staff and undertaking a number of special studies for our use.

1.6 We went out on a tour of the various States beginning with the 31st July with a view to getting a first hand impression of the local problems and difficulties and also to check and supplement the information that was available in New Delhi. In the course of these tours, we examined not only the Ministers and officials of the State Governments but also a large number of non-officials representing various interests. We completed our tour by the 8th October, and met in New Delhi from the 9th to

the 31st October, for finalising the report. We had a number of discussions with the Ministers and senior officials of the Union Government as also with Members of Parliament, leaders of national political parties, trade unions, farmers' and traders' organisations and several leading public men and economists. During the course of the enquiry we visited fourteen States, examined about nine hundred witnesses and received about a thousand memoranda.

1.7 As it was represented to us by some witnesses that the available statistics regarding foodgrains were very unreliable, we took special care to go into the question. We examined statisticians working in the Union and State Governments who are responsible for the collection of these statistics and also consulted a number of other experts. We had also the benefit of advice given by the Statistics Division of the Reserve Bank of India. **Statistics.**

1.8 Our assessment of the present method of collection of statistics of food production in this country and suggestions for improvement are set out in Appendix IV. The accuracy of the official statistics available to us is subject to the explanations given by us in that Appendix. We may, however, note here that statistics of food production by their very nature cannot be completely accurate and they can never be as firm as statistics of, say, industrial production or bank credit or money supply. But the quality and coverage of food production statistics in India are gradually improving and they are now much better than what they were ten years ago. The improvements in the collection themselves have introduced, however, certain elements of incomparability between production figures of recent years and those of earlier years. To overcome this difficulty, a series of index numbers has been issued by the Ministry of Food and Agriculture which seeks to make necessary adjustments for various changes. Hence, if the production in recent years is to be compared with production in earlier years, it is only the index numbers which should be used. For comparison with earlier years, therefore, we have primarily used the index numbers of production. The published estimates of production for 1955-56 and 1956-57 are, however, fully comparable and, as such, have been utilised by us.

1.9 We have divided our report into eleven chapters. The next two chapters give a brief review of the food situation during the last few years and of the policy of Government regarding distribution, production and prices of foodgrains. In the fourth chapter we have attempted an assessment of recent developments while in the fifth chapter we have attempted a prognosis of the food situation as it is likely to develop during the next few years. In the next four chapters we have formulated our main conclusions and made a number of recommendations for tackling the food problem in future. In the tenth **Plan of the Report.**

chapter we have dealt briefly with the problem of scarcity areas.

1.10 As the time at our disposal was very limited, we have found it necessary to confine ourselves to the basic problems relating to the distribution, production and prices of foodgrains in the country from an over-all point of view only. We could not examine all aspects of the food situation, especially those facing individual States or vulnerable groups of the population. We have also been unable to make any special study of the recent difficulties that resulted from drought in eastern India towards the closing days of our enquiry. It was a matter of emergency relief which Government alone could handle. We hope, however, that the general recommendations that we have made about some of these areas, if implemented, will go a long way in preventing similar distress in future.

Acknowledgements.

1.11 We would like to take this opportunity to express our thanks to the various representatives of the Union and State Governments, political parties, farmers, trade unions, consumers and traders as also to the eminent public men, economists and other experts who responded to our invitation most ungrudgingly and offered their advice and views on problems facing the food economy of the country. We are particularly grateful to the officers and investigators of the various organisations mentioned earlier who have undertaken field investigations on our behalf.

1.12 Our work was considerably lightened by the expert advice available not only to the Committee as a whole but also to every Member from the Member-Secretary. The research work as also the secretariat work of the Committee were so expeditiously and competently organised that there never was any hitch or delay in our work. We would also like to record our appreciation of the assistance that we have received from the members of our staff and also of the Directorate of Economics and Statistics, Ministry of Food and Agriculture, who have worked extremely hard throughout the course of our enquiry. Assistance given by Shri S. C. Chaudhri, Deputy Secretary, Prof. V. M. Dandekar and Dr. J. P. Bhattacharjee, Technical Consultants, and Shri Ram Dayal, Research Officer, deserves special mention.

CHAPTER II

REVIEW OF FOOD SITUATION: TRENDS IN PRICES SINCE 1950-51

I

Transition from Controls

Introduction. 2.1 To appraise adequately the rising trend of food prices since the middle of 1955, it is necessary to review the developments over a somewhat longer period. In an economy like that of India where marginal surpluses or marginal deficits produce a disproportionate effect on the over-all food situation, the so-called surpluses and shortages over a period of time have to be viewed together to obtain a proper perspective. We accordingly propose in this chapter to refer briefly to the trends in prices and the developments in Governmental policies since 1950-51, which forms in several ways an appropriate starting point for our survey. Besides immediately preceding the First Five Year Plan, 1950-51 also reflected the sharp, though short-lived, impact of the Korean War boom which presented an interesting comparison to the current phase of rise in prices.

The last phase of controls. 2.2 Just before the First Plan was launched, *viz.*, in 1950-51, the country was in the grip of serious food shortage and food prices were ruling at high levels. The prices of cereals in particular reached an all-time peak which was 421 per cent. higher than the pre-War level and 14 per cent. higher than the level which prevailed before the Korean boom (See Chart I). The price of rice ruled at Rs. 33·00 per maund at Patna, of wheat at Rs. 24·50 at Jabalpur and of jowar at Rs. 22·50 at Amravati. The Korean boom, however, was essentially a raw materials inventory boom originating primarily from external factors and had only indirect effect on prices of foodgrains in India through prices of competitive commercial crops. A more direct cause of the rise in prices was the sharp fall in the output of cereals, largely as a result of a series of natural calamities in 1950-51 when the production index (base 1949-50 = 100) declined to 90·3. The corresponding figure for all foodgrains was 90·5. As against this reduced production, which hardly reflected any increase over the pre-War period in *per capita* terms, money supply stood at the high level of 327·5 per cent. above pre-War and there was a strong latent inflationary pressure which was sought to be repressed through a system of countrywide procurement and rationing. Yet prices could be kept under check only

with considerable difficulty. Prices of cereals had, on the whole, risen by 14·3 per cent. between May and November, 1950. Issue prices from ration shops were 12 per cent. to 25 per cent. higher than procurement prices while market prices in the areas not rationed statutorily were often 15 per cent. to 50 per cent. higher than issue prices. In the statutorily rationed areas, black-market prices were much higher. On the one hand, rationing commitments increased steadily, new areas had often to be brought under rationing, and ghost cards tended to multiply to abnormal proportions; on the other, procurement registered a sharp fall. It appeared as though after a few years of successful operation the system of rationing and procurement was ending up in a vicious circle of reduced supplies and enlarged demand for foodgrains as a result of impairment of the incentive to produce under the schemes of procurement in force. An attempt was made to counter-act the effect of lower production and reduced procurement by stepping up imports which reached the record figure of 4·7 million tons in 1951. This high level of imports was partly facilitated by *ad hoc* assistance by the U.S.A. in the shape of a loan of 2 million tons of wheat.

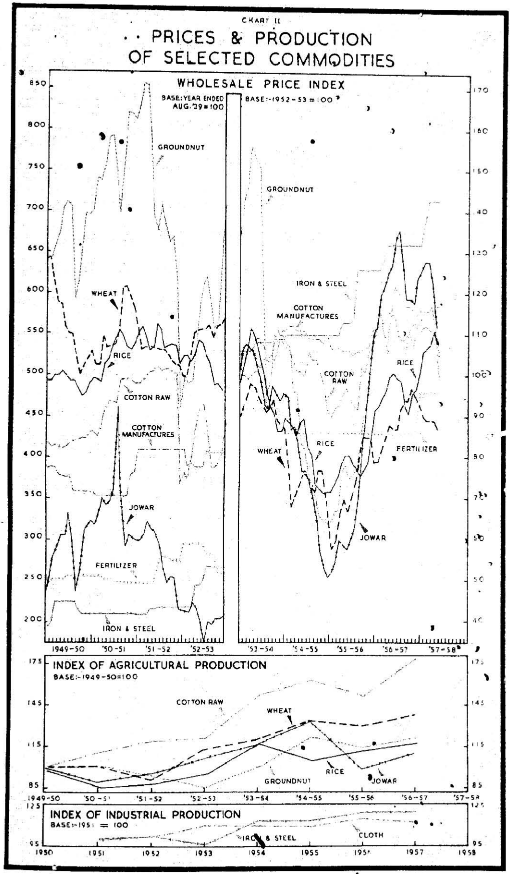
2.3 Large releases from Government stocks, better crop prospects and a tighter monetary policy helped to bring down prices substantially during the following two years. The production index for cereals went up to 101·4 in 1952-53 or an increase of 12·3 per cent. over 1950-51. At the same time, money supply declined by 12·1 per cent. The price index for cereals was 8·1 per cent. lower than in 1950-51. The world production of cereals, especially wheat and rice, had also improved considerably, and the sellers' market gradually yielded place to a buyers' market. There was a general feeling that stability had been largely restored. In fact, 1952-53 proved to be one of the most stable years in recent times.

II

Recession

Beginning of recession.

2.4 This stability was, however, short-lived. The year 1953-54 saw the beginning of a recession which gathered increasing momentum in the following year. The price index for cereals which had firmed up during the earlier months of 1953, and stood at 108 in July, 1953 took a downward turn thereafter and gradually slided down to 82 in June, 1954. As will appear from Chart I, this decline in prices of cereals continued throughout the year. After a temporary dip towards the end of 1953, the prices of manufactured goods firmed up again and remained relatively stable for some months thereafter. There was a small fall in the general price index which was primarily accounted for by a fall in agricultural prices. The fall in



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prices of cereals was, however, much sharper than in other prices and resulted largely from an unprecedented increase in production during 1953-54, helped to a considerable extent by exceptionally good weather. The production index for cereals went up from 101·4 to 120·1 and that of all foodgrains from 101·1 to 119·1 between 1952-53 and 1953-54. This large increase in production had a significant impact on the food economy, as shown by the trend of prices and the net releases from imported stocks. Some idea of the former may be had from Chart II. As regards the latter, the net release from imported stocks declined from 3·3 million tons in 1952 to 2·5 million tons in 1953 and 0·7 million tons in 1954.

Recession deepens.

2.5 The full impact of the increase in production in 1953-54 was felt with a time-lag only in the following year, 1954-55, when supply temporarily outstripped demand. Production in 1954-55 was, however, not as good as in 1953-54. The production index for cereals declined from 120·1 in 1953-54 to 114·0 and of foodgrains from 119·1 to 114·4. Yet the carry-over of stocks from the previous year was so large that it continued to push prices in their downward course despite some fall in production. Procurement and rationing had been completely given up by the middle of 1954 and the releases from Government stocks fell to very low levels between June, 1954 and June, 1955. But the pressure of stocks with the traders and cultivators carried over from the previous year's record crop was so great that there was an accelerated decline of prices of all foodgrains upto the middle of 1955. For instance, the price index of cereals (base 1952-53 = 100) declined to 67 in May, 1955. On the other hand, the price index for all manufactures stood at 99·0. Prices of other agricultural commodities also declined less than those of cereals, the index of food articles as a whole fell to 82 and of industrial raw materials to 94. This fall in prices of cereals in India was in a sense unique, for hardly in any other country was there such a sharp fall during this period. The terms of trade which had been favourable to producers of cereals until 1953-54 moved sharply against them in 1954-55 (See Chart III) and there was considerable distress, particularly in some areas or regions where the decline in prices was exceptionally heavy. Between June, 1953 and June, 1955 the all-India price index of rice had fallen by 29 per cent., of wheat by 35 per cent. and of jowar by 48 per cent. As against these average declines, the price of rice fell by as much as 66 per cent. to Rs. 5·00 per maund at Imphal (Manipur), by 59·1 per cent. to Rs. 13·50 per maund at Kozhikode (Kerala) and by 49·5 per cent. to Rs. 13·00 per maund at Patna (Bihar); of wheat fell by 50 per cent. to Rs. 10·00 per maund at Rewa (Madhya Pradesh) and by 46·5 per cent. to Rs. 9·50 at Kanpur (U.P.) and by 39·4 per cent. to Rs. 12·50 at Jabalpur (M.P.) and of jowar, fell by 60 per cent. to Rs. 5·31 at Jhansi (U.P.) and by 54 per cent. to Rs. 5 at Ujjain (M.P.). The fall in the

average price level was large enough, but such discrepant movements in prices in different regions added to the difficulties of the situation.

Depressed pockets. 2.6 On the one hand, acute distress resulting from sharp fall of agricultural prices and incomes was reported from many parts of the country, there was pressing demand for special development assistance for combating acute depression in the districts of Surguja, Bastar, Chanda, Farukhabad, Etah, Gonda, Badaun, Aligarh, Hamirpur, Mirzapur, Sitapur, Lakhimpur, Tehri-Garhwal, Jhabua, Bhilwara, Sidhi, Dang, Banaskantha, Sabarkantha, Ratnagiri, etc.

Scarcity areas. 2.7 On the other hand, in spite of the very low level of food prices and good supply position in large parts of the country, scarcity conditions appeared in a number of areas even during the two years 1953-54 and 1954-55. In 1953-54, parts of Bombay, Andhra Pradesh, Rajasthan, Madras and Madhya Pradesh were affected by scarcity; parts of Assam, West Bengal, north Bihar and eastern U.P. were affected by floods and parts of Orissa and south Bihar suffered on account of irregular and deficient rainfall. In 1954-55, scarcity conditions were reported from parts of Bombay, Rajasthan and Madras. Orissa suffered from drought in the beginning of the monsoon and from serious floods later in the season. South Bihar suffered from drought while north Bihar was affected by severe floods. The States of Assam, West Bengal, U.P. and Punjab were also affected by floods. Simultaneously, an increase in the volume of unemployment was reported from many areas (See Chart I).

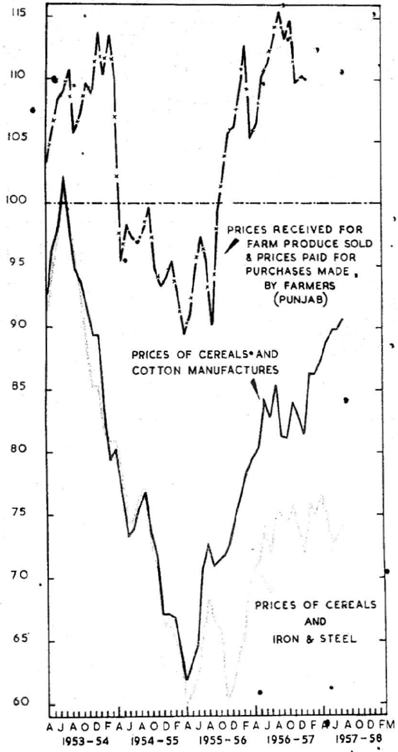
Factors in the price-break. 2.8 The programme of investment under the First Plan had yet to gather full momentum. Deficit financing and bank credit had hardly started to expand significantly. Meanwhile, a sharp increase in the production of foodgrains accompanied by the cessation of Government procurement with consequent temporary abeyance of demand until trade could fully resume its normal role led to the break in prices.

Leap in production. 2.9 The big leap in output in 1953-54 was by no means an unprecedented phenomenon. Fluctuations in output have been a frequent phenomenon in Indian agriculture. Similar increases have taken place especially when a good monsoon has come after three or four years of drought. Minor irrigation works, like tanks and wells, in particular, can carry sufficient water only through one or two seasons of drought. When there is prolonged drought for several seasons, they often get dried up causing an accelerated fall in production followed, with good monsoon, by an accelerated rise in production. This effect was all the more pronounced in 1953-54 because a large number of minor irrigation works, particularly tanks, which were created

CHART III

INDEX OF PRICE RATIOS

BASE:- 1952-53 = 100



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between 1949-50 and 1952-53 but could not be fully effective in those years due to drought, got fully replenished in 1953-54 and led to a much more than proportionate increase in yield. This is an important feature of our agricultural production which has to be borne in mind in any study of our agricultural economy. On the whole, it may be said that the phenomenal increase of production in 1953-54 was largely the result of favourable weather conditions but it also reflected the cumulative result of the Grow More Food Campaign.

Acceleration of price fall.

2.10 The fall in prices which followed the increase in production was significantly intensified by the phenomenon of acceleration of price movements. The decline in prices of different foodgrains was far out of proportion to the increase of production, with the consequence of an actual decline in the incomes of the cultivating population.*

2.11 One reason for the magnification of price movements was that the marketed surplus tended to increase more than proportionately as production rose. The demand for foodgrains being relatively inelastic over the short term, a sudden increase in supply tended to result in a disproportionate fall in prices. Also, once the expectation was created that higher production and higher market arrivals would bring down prices, there being no other counter-vailing factor after the cessation of Government procurement, the trader too tended to go slow with his purchases, and in fact tended to liquidate stocks accumulated during the days of control. Other holders of stocks, *e.g.*, rice mills, reacted similarly. Thus the initial fall in prices gave rise to a psychology of slump. The selling pressure increased while buying activity diminished continuously. Generally when the increase in output is small, the selling pressure subsides and buying pressure at lower levels of prices steadily increases and puts a check to a further fall in prices. But the increase in output of 1953-54 was large and was followed in 1954-55 by an output which although smaller was above the normal. Existence of large stocks with Government also tended to discourage traders from making further purchases of grains.

III

Rise in Prices

Government action to arrest price fall.

2.12 To arrest the decline in prices, Government took a series of measures which have been described in some detail in the next chapter. It may be mentioned here that developmental expenditure under the Plan was considerably stepped up from 1954-55 and amounted to Rs. 667

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*This decline, in terms of the value of output of agriculture in 1954-55 as compared to 1952-53 under the National Income Estimates, amounted to as much as 9·5 per cent.

crores in 1955-56 as against Rs. 343 crores in 1953-54. Deficit-financing, bank credit and money-supply also started on the upgrade from about that time (See Chart I). Besides, food imports and releases from Government stocks were cut down to the barest minimum in 1954-55. The embargo on exports of foodgrains was lifted for the first time after a decade. Government also undertook limited price support operations early in 1955. All these helped to create a general feeling that the bottom was perhaps reached and prices could not fall further.

Prices take upward turn.

2.13 A reversal of the trend was thereupon initiated. Traders were reported to have once again started building up their normal pipeline stocks. It is, however, doubtful if the upward swing of prices would have become so pronounced unless two things happened. In the first place, by autumn, 1955 it became apparent that on account of bad weather conditions, the millets crop was going to be very poor. In fact, the production index of jowar fell from 133·4 in 1954-55 to 98·5 in 1955-56, of maize from 127·9 to 111·1 and of small millets from 127·0 to 100·1. The production of coarse grains was only 19·0 million tons in 1955-56 as against 22·2 million tons in 1954-55. The total production of cereals was also substantially lower, *viz.*, 54·5 million tons in 1955-56 as against 56·1 million tons in 1954-55. Although weather conditions were largely responsible for the decline in production, the low levels to which prices of foodgrains had fallen also contributed to this outcome.* This is borne out particularly by the fact that the index number of agricultural production as a whole had not fallen to the same extent as the index number of production for cereals. While the former increased from 114·3 to 116·4 in 1954-55 and then slightly declined to 115·9 in 1955-56, the latter declined from 120·1 in 1953-54 to 114·0 in 1954-55 and 113·7 in 1955-56. Even within the cereals group, it was the production index of jowar, the price of which had fallen much more than that of other commodities, that registered a sharp decline. The production index of jowar declined from 133·4 in 1954-55 to 98·5 in 1955-56; the price index of jowar had fallen to as low a level as 51 in April, 1955.

2.14 As reports of the short-fall in the millets crop reached the markets in October, 1955, prices took an upward turn. At first, the rise in prices looked like a normal correction of the earlier fall. The price index of rice continued for some time to be relatively stable largely because production of rice was reported to be good and Government had fairly large stocks of rice out of which they sold in the open market a substantial quantity that

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*The International Bank for Reconstruction and Development noted in their Report submitted to Government of India in 1957 "the instability of agricultural prices over the past two or three years has had an adverse effect on production ; certainly it is now generally recognised that the foodgrains prices were allowed to go too far in 1955".

was likely to deteriorate. But the price index of jowar rose from 55 to 71, of bajra from 73 to 99 and of wheat from 60 to 80 between June and December, 1955. The rise in prices was helped to a certain extent by the knowledge that Government had no stock of millets and its stock of wheat was also low.

2.15 There were reports of local scarcity in certain parts of Rajasthan, Bombay, Bihar, Orissa and Madras mainly caused by drought, floods and cyclones. Rise in prices first took place in some of these areas and then gradually spread to others. For instance, price of jowar jumped from Rs. 5 to Rs. 10 between September and December, 1955, in Jhalawar (Rajasthan) followed soon after by sharp rises in Ujjain, Surat and a number of other centres in the country. Similarly, the price of wheat rose from Rs. 14·50 to Rs. 19·00 between September and December, 1955, in Rajkot followed by sharp rises in other areas.

Price up-trend gathers momentum.

2.16 Throughout 1956 the rise in prices gathered momentum. It was millets which led the movement. The price index of jowar increased from 83 in January to 102 in March, 120 in June and 136 in November, 1956. After an initial spurt to 85 in January, wheat remained steady upto March and then fell to 79 in April and rose to 88 in August and to 92 in November. Rice rose from 77 in January to 86 in March, to 95 in June, to 101 in September and then fell to 99 in November. Government tried to control the situation by prohibiting exports, increasing releases from Government stocks and opening fair price shops. The releases from Government stocks were stepped up from 136,000 tons in August, 1955 to 221,000 tons in December, 1955. There was a temporary fall during the kharif season; the quantity released stood at 97,000 tons in April, 1956 but went up to 148,000 tons in August, and 274,000 tons in November, 1956. Attempts were also made to hold prices by imposing certain restrictions on bank credit, first between May and November, 1956 and again from February, 1957 onwards for rice. On the whole, the general level of prices went up by 13·2 per cent. during 1956, mainly owing to the rise of agricultural prices.

International price trends.

2.17 The rise in prices in India was not an isolated phenomenon. During 1956, there was a rise in price roughly of the order of 7 to 9 per cent. in most of the Asian countries, 5 to 6 per cent. in U.S.A. and 4 to 5 per cent. in European countries. However, the greater rise of prices in India than in world prices during 1956 followed a phase of substantial price decline in 1954 and the first part of 1955 when world prices experienced a small rise. The rise in Indian prices during 1956, therefore, could be regarded as partly compensating the earlier fall in prices.

Rise in agricultural production in 1956-57.

2.18 The 1956-57 crop was good. The season was generally favourable and the rising trend in prices at sowing time also gave a spurt to production. The production of

foodgrains in 1956-57 was as much as 68.69 million tons as compared to 65.29 million tons in the previous year. Production of cereals increased by nearly 3 million tons, of which that of rice increased by about 1.3 million tons, of coarse grains by a million tons, and of wheat by about 0.5 million tons.

Paradox of rise in prices with rise in production.

2.19 An apparent paradox of the situation, however, was that in spite of this substantial increase in production, prices continued to rise. There was, of course, a temporary fall immediately after the kharif harvest. The price index of cereals fell to 95, of rice to 91 and jowar to 119 in January, 1957. But soon thereafter prices of kharif cereals began to rise. In August, 1957 cereals index stood at 106, rice at 111 and jowar at 122. Wheat index which had risen to 97 at the fag-end of the season, in February, 1957, declined to 89 in August, 1957. On the whole, the rise in prices during 1956-57 was much more moderate than in 1955-56: the rise in prices during the lean season (July to September) was smaller than in the corresponding part of 1955-56, while the fall in prices at harvest time was larger than in the previous year. Thus in respect of rice the seasonal rise (from January to August) in 1956-57 was 22 per cent. as against 29·9 per cent. in the previous year, while the fall (from September to January) was 9.9 per cent. as against a fall of 4.9 per cent. in 1955-56. Similarly for wheat, the seasonal fall in 1956-57 (from February to May) was 7·2 per cent. as against 7·1 per cent. in 1955-56, while the seasonal rise in 1955-56 (from May to February) was 22.8 per cent. as against 46.6 per cent. in the previous year. These trends furnish a clue to the apparent paradox referred to above. The rise in prices would have been even greater were it not for the increase in production: the increase in production served to restrain the price uptrend during the year.

The price rise slackens in 1956-57.

2.20 The following table brings out the distinct slackening in the pace of advance of prices in 1956-57 as compared to a year before as well as the wide divergence in the rise in prices of different commodities:

Commodity or Group	Price Index in April or May (1952-53=100)				Percentage increase of		
	Month	1955	1956	1957	1956 over 1955	1957 over 1956	1957 over 1955
Cereals	May	67	90	103	34	14	54
Pulses	April	48	74	84	54	13	75
Rice	April	72	92	101	28	10	40
Wheat	May	58	79	90	36	14	55
Jowar	April	51	111	124	118	12	143
Gram	May	38	62	71	62	14	87

2.21 The rise in prices in the case of different commodities differed widely, the rise being greater in the case of those which had suffered heavily in output. Jowar was subject to particularly strong upward pressures mainly because of the serious setback in output. Rice prices went up even though the output of rice was higher than in the previous year. This was an evidence of the strength of the forces of demand in causing the uptrend. Some retardation in the rate of rise in prices in the following season was natural. But the very large difference in the order of increase between 1955 and 1956 and that between 1956 and 1957 appears to confirm the conclusion that at the 1955-56 level of output consumer demand was in excess of supply and that this gap was greatly narrowed down with the better crops in 1956-57 season. The trend of prices during 1957, however, showed that inflationary forces were still in operation. Wheat prices during April, May and June, 1957 showed a seasonal decline. But this decline was so weak that the situation did not seem to be comfortable. Similarly, the seasonal decline in the case of rice in January, 1957 was much smaller than the off-seasonal rise since then. Prices of jowar after the seasonal dip flattened out in January, February and March, 1957 after which they tended to harden.

Price movements in recent months.

2.22 The movements in prices of individual commodities after April or May, 1957 disclose some noteworthy features. The prices of rice continued steadily to firm up, but showed a decline during September. Wheat prices have steadily eased under the impact of large imports and a favourable harvest. A factor of some importance which has influenced the very recent turn in prices, that became a fairly pronounced downturn for some weeks in jowar and bajra, is the stricter credit policy enforced by the Reserve Bank from early July, 1957.

Relative instability of food prices.

2.23 The general price index declined by 17.6 per cent. between the middle of 1953 and the middle of 1955 and then rose by 23.4 per cent. by the middle of 1957. The price index of manufactured goods first fell by 2.8 per cent. and then rose by 10.5 per cent. during the same periods. As against this, price index for cereals first slumped by 34 per cent. and then shot up by 51 per cent. Apart from the level of food prices, it is the relative instability of food prices with its consequences in instability of the incomes of agricultural producers and of costs of

living, costs of production, employment and other elements of the economy that forms one of the problems for consideration. Throughout this period, seasonal rises and falls also changed their character, troughs being deeper in the earlier years and peaks more prominent in the later years, as may be seen from the following table:

Fall in price during the year from previous peak to trough and rise in price from previous trough to peak.

(Per cent.)

Crop Year	Rice	Wheat	Jowar
1953-54 trough	—22·3	—27·7	—14·1
peak	+3·4	+13·2	+6·5
1954-55 trough	—20·0	—24·7	—44·9
peak	+12·5	+46·6	
1955-56 trough	—4·9	—7·1	
peak	+29·9	+22·8	+166·7
1956-57 trough	—9·9	—7·2	—12·5
peak	+22·0		+7·6

2.24 The fluctuations in the all-India average prices are wide enough but the variations in prices in individual centres are even wider. We have already noted the divergence in movements of prices among a large number of important centres during the downward phase of prices in 1954-55. Similar disparities in movement of prices from one centre to another may be observed during the upward phase of prices in the last two years, as in the table below:

Mid-year prices

		June, 1953	June, 1955	June, 1957	Percentage increase (+) or decrease (—) in 1957 over 1953	1955
(a) Rice						
1. All-India Index No. (Base: 1952-53=100)		109	77	106	—2·8	+37·6
2. Patna (Bihar)	Rs.	24·00	13·00	23·00	—4·2	+76·9
3. Nowgarh (U.P.)	„	28·00	14·62	21·75	—22·4	+48·7
4. Nandgarh (Mysore)	„	20·39	11·50	20·00	—2·0	+73·9

Mid-year prices—contd.

		June, 1953	June, 1955	June, 1957	Percentage increase (+) or decrease (—) in 1957 over 1953	1955
			(a) Rice—contd.			
5. Balurghat (West Bengal)	Rs.	21·50	14·75	22·50	+4·6	+52·5
6. Kozhikode (Kerala)	,,	33·00	13·50	20·55	−37·8	+52·2
7. Imphal (Manipur)	,,	14·75	5·00	7·25	−50·9	+45·0
8. Kakinada (Andhra Pradesh)	,,	25·25	13·50	20·00	−20·8	+48·1
9. Kalyan (Bombay)	,,	26·08	14·00	21·00	−19·5	+50·0
10. Cuttack (Orissa)	,,	12·00	17·87	16·75	+39·6	−6·3
11. Calcutta City	,,	16·75	17·50	22·50	+34·3	+28·5
12. Madras City . .	,,	21·37	13·37	19·20	—10·2	+43·6
			(b) Wheat			
1. All-India Index No.		95	·62	88	−7·4	+41·9
2. Jabalpur (M.P.) .	Rs.	20·62	12·50	17·75	−13·9	+42·0
3. Kanpur (U.P.) .	,,	17·75	9·50	12·81	+27·8	+34·8
4. Kotah (Rajasthan) .	,,	14·44	9·00	14·62	+1·2	+62·4
5. Abohar (Punjab) .	,,	13·62	11·12	13·50	−1·9	+21·4
6. Dhanduka (Bombay)	,,	19·42	11·00	18·50	−4·8	+68·2
7. Rewa (M. P.) .	,,	20·00	10·00	15·31	−23·5	+53·1
8. Delhi City .	,,	15·62	10·00	15·00	−4·0	+50·0
9. Bombay City .	,,	19·42	12·87	19·25	−0·9	+49·5
			(c) Jowar			
1. All-India Index No.		109	57	127	+16·5	+122·8
2. Amravati (Bombay) .	Rs.	11·50	6·00	13·25	+15·2	+120·8
3. Ujjain (M. P.) .	,,	11·00	5·00	14·00*	+27·3*	+180·0
4. Nandyal (Andhra Pradesh) .	,,	13·50	5·75	16·00	+18·5	+178·2
5. Jhansi (U. P.) .	,,	13·25	5·31	13·56	+2·3	+155·4

*Relates to 5-7-57.

Regional disparities in price movements.

2.25 These data illustrate clearly the heterogeneous character of and lack of mobility in the Indian economy and also underline the pit-falls of coming to a general conclusion on the basis of averages alone. For instance, although all-India averages do not show an appreciable rise in cereals prices as compared to the base year 1952-53, they do not register the difficulties, say, of the people of Ujjain who have to pay 180 per cent. more than in 1955 and 27.3 per cent. more than in 1953 for their jowar, or of Calcutta who have to pay 28.5 per cent. more than in 1955 and 34.3 per cent. more than in 1953 for their rice or of Rewa where wheat prices first fell by 50 per cent. and then again rose by 50 per cent. all within four years. All-India average prices do not record the considerable regional disparities in prices, such as are indicated by the fact that in June, 1957 price of rice at Patna was Rs. 23·00 per maund as against Rs. 16·75 at Cuttack and Rs. 7·25 at Imphal or of wheat was Rs. 19·25 in Bombay as against Rs. 12·81 in Kanpur. In fact, it was such sharp variations in prices over space as well as the changes over time during the last quinquennium which created many of the stresses and strains in the economy.

2.26 We recognise that under our terms of reference we are concerned primarily with the problem of prices in the country as a whole. Regional disparities indicate the development of scarcity pockets caused by vicissitudes of weather or difficulties of transport in a vast country like ours. In an inflationary situation, however, price rise in any area tends to be sticky and the rise in prices in pockets of scarcity tends to spread and thus contributes to a general rise in prices. To the extent the problem of regional disparities lends itself to solution through better organisation of food policy and administration, the question will be covered by our recommendations.

CHAPTER III

REVIEW OF FOOD POLICY IN RECENT YEARS

I

Food Distribution

Introduction

3.1 Government's food policy in recent years may be reviewed broadly in relation to its two main aspects: (i) short-term and (ii) long-term. The former consisted chiefly of programmes of food distribution and the latter of food production. They are the regulatory and developmental aspects of policy respectively. However, the regulatory parts of policy are not necessarily all short-term nor are the developmental aspect wholly long-term. Price and selective credit policies are ancillary to both aspects and have recently assumed some importance, the latter having been operated by the Reserve Bank primarily as a restrictive instrument.

Control, decontrol and partial recontrol.

3.2 Between 1951 and 1957 Government's policy regarding food distribution has undergone a change successively from complete control to complete decontrol and back to partial control. There was first a cautious approach towards relaxation of the irksome features of controls; ration shops were substituted by fair price shops, the volume of procurement was reduced and inter-State bans on movement were replaced by zones. This was followed by an accelerated move towards decontrol. Rationing and procurement, fair price shops and zones were all abandoned. Prices fell to low levels, imports were cut down, price support operations were undertaken and even some exports were allowed. Thereafter, prices again took an upward turn, at first slowly and later somewhat rapidly; exports were prohibited, sales from Government's stocks were accelerated, larger imports were arranged for, fair price shops were opened and, lastly, zones and procurement, on a limited scale, were brought back.

3.3 In 1951, there were as many as 122 million persons under rationing of whom 47 million were statutorily rationed, 3·8 million tons of foodgrains were procured within the country and 4·7 million tons valued at Rs. 217 crores were imported. The Food Administration itself cost Rs. 10 crores for the Centre and the States. A total subsidy of Rs. 44·6 crores had to be paid for reducing the price of imported cereals to the level of domestic prices although the latter had reached an all-time high peak. There were, however, indications fairly early in 1952 that the worst phase of the food shortage had perhaps passed

and with another good season the food situation in the country, for the time being, might turn the corner. Some of the irksome features of food control had created a revulsion in the public mind against it and had led to a widespread feeling in the country that a time had perhaps come when controls could be gradually relaxed. In particular, the existing system of control was held to be adversely affecting production and, even more, the volume of marketed surplus.

Proposals for planned relaxation of food controls.

3.4 The Ministry of Food & Agriculture, therefore, made certain proposals in March, 1952 for a gradual relaxation of controls. The essential features of these proposals were: a progressive reduction in the rationed population, restoration of free markets with adequate buffer stocks being maintained for emergency purposes, control of bank credit and licensing of traders with a view to keeping a minimum administrative control over them. This scheme was to be put into operation with effect from 1st November, 1952 if it was definitely known that the prospects of the following kharif harvest were good. It was urged in support of the scheme that while the new system proposed would safeguard the essential points of the then existing system of controls, inter-State bans would go; the control of the Union Government would become more effective; re-adjustment of rationed areas, wherever necessary, would be simpler; food policy would become relatively free of local political pressure and many inhibiting factors would disappear leading ultimately to a healthy effect on production, marketed surlpus, prices, imports and subsidy.

3.5 The objective of the scheme was stated to be planned relaxation of controls so as to provide safeguards some of which might have more than transitional value. Government were, however, unable to accept this scheme at the time because they felt that the situation required careful watching for some time more before one could conclude that the food position had eased sufficiently to warrant a change in the existing system of controls. Moreover, there was a feeling in some quarters that even if the food position improved, controls might be required to be continued as a permanent feature of planned economy. Three months later, however, the Ministry made another review of the situation in consultation with the State Governments after their reconstitution following the general elections. There was then a feeling in many States that it was not only necessary to implement the policy of relaxation of controls proposed earlier by the Ministry but even to expedite the change-over to decontrol.

3.6 For financial reasons, the subsidy on imported foodgrains had already been withdrawn with a few minor exceptions, with effect from March, 1952. This led to some

rise in the issue price from ration shops and reduced the attraction of the rationed grains for many people. Meanwhile, with the prospects of a better crop, open market prices also started coming down. There was a switch-over of part of the consumer's demand to the open market which was reflected in a sharp fall in offtake from the ration shops. A favourable atmosphere for removal of controls was thus gradually created.

Foodgrains (Licensing and Procurement) Order, 1952.

3.7 It was, however, recognized that any scheme of decontrol would be attended with certain risks and that it was necessary to take adequate measures before any substantial relaxation could be considered. The Foodgrains (Licensing and Procurement) Order, 1952 was therefore issued on the 8th July, 1952. Under this order no person was to engage in any business which involved purchase, sale or storage for sale of any foodgrains except under and in accordance with a licence issued by the State Governments. The Order empowered the State Governments to require any banking company to furnish information relating to any financial assistance granted by it to any dealer. It also empowered them to require any dealer, in case they considered it necessary or expedient, to sell his stocks to specified persons at the procurement price plus 10 per cent. and in the event of his not doing so the State Government could seize his stocks and sell them to the needy at procurement price plus 10 per cent. The Order also gave powers to the State Governments to enter and search the dealers' premises and to collect from them periodical returns about stocks. The Order was at first made applicable to wheat, paddy, rice, jowar and bajra but was later extended to maize, barley and minor millets. The promulgation of this Order was followed by gradual relaxation of controls during the second half of 1952.

Progressive decontrol.

3.8 The year 1953 opened with bright crop prospects and the decline in prices continued at a fairly sharp pace and the development of events was such that Government were able to relax controls much faster than they had perhaps originally contemplated. The offtake from ration shops began to go down sharply and stocks with Government mounted up. In November, wheat and coarse grains were decontrolled except for restrictions on inter-State movements. The ban on inter-State movement of coarse grains was completely removed by the end of 1953. Procurement of wheat and coarse grains was given up in almost all the States. Procurement of rice also was modified or suspended in several States. Imports were cut down substantially. The actual imports of foodgrains during 1953 were 2 million tons as against 3·86 million tons in 1952 and 4·7 million tons in 1951. Nevertheless, as a precautionary measure, the Government of India decided to continue to participate in the new International Wheat Agreement which was renewed for three years in August, 1953. India's quota was, however, reduced from 1·5

million tons to 1 million tons. Government also decided to permit private trade to participate in a limited way in the import and export trade in foodgrains.

3.9 After the record production of cereals in 1953-54 there was a virtual end of food controls which had been started exactly ten years before. In January, 1954 inter-State movement of gram was made completely free. In May, two wheat zones were formed—one comprising the States in the North and the other in the West. Movement of wheat between the States in each zone was made free but exports outside the zone remained banned. The area of the West Zone was gradually extended to cover the States in southern India. In December, 1954 a third wheat zone comprising the States of U.P. and Bihar was also formed. Procurement of coarse grains and wheat was completely given up by March, 1954 in those States where it had not been abandoned in 1953. Rice was decontrolled with effect from 10th July, 1954, when statutory rationing of rice was also given up.

Reserve stocks.

3.10 Ever since food difficulties had started in 1943, various proposals had been under consideration of Government for the creation of a Central Food Reserve. The Foodgrains Policy Committee of 1943 had recommended that such a reserve amounting to five lakh tons should be constituted. The Famine Enquiry Commission of 1945 endorsed the recommendation of the Foodgrains Policy Committee. Some of the members of the Agricultural Prices Enquiry Sub-Committee of 1947 recommended that a reserve stock of the order of 15 lakh tons would be necessary while other members of that Committee felt that it should be as large as 30 lakh tons. The Foodgrains Policy Committee of 1948 recommended that a reserve of 10 lakh tons should be built up immediately. Because of shortage of funds and also of supplies, it had not been possible to build up these reserves so far. As the food situation eased in 1954, Government felt that time had come when it was both possible and necessary to maintain a reserve. Accordingly Government decided in February, 1954 to maintain a Central Reserve of foodgrains of 15 lakh tons, partly of rice and partly of wheat. They also decided to construct additional storage accommodation for holding this reserve stock. So far as wheat was concerned, there were adequate stocks in hand. For rice, an agreement was reached with Burma in March, 1954 for the import of 9 lakh tons partly for building up the proposed reserve stock and partly for providing some relief to that country.

Shift of policy from ceilings to floors.

3.11 At the end of 1954, there was no rationing anywhere in the country. There was also no subsidy. Total imports during 1954 amounted to 8 lakh tons and total procurement to 14 lakh tons. With the fall of prices to low levels, the accent of policy shifted from ceilings to floors. As

early as in June, 1954, exports of pulses were allowed freely in order to give some support to the market. In July, limited exports of rice were also allowed with a view to reviving India's export trade in fine rice to certain traditional markets, which had to be banned after the outbreak of World War II. The superior varieties of Indian rice fetched a good price abroad and it was felt that with the import of relatively cheaper inferior varieties of rice under the Indo-Burmese Agreement, the situation was favourable enough to justify some exports of rice being permitted. During 1954 and 1955, about 108,000 tons of rice were exported. The Government also allowed exports of jowar, maize and wheat products but the quantities actually exported were very small, *viz.*, 8,000 tons of jowar, 3,000 tons of maize and 4,000 tons of wheat products. There was, however, a substantial export of pulses.

3.12 On the 26th January, 1955 the Essential Supplies (Temporary Powers) Act, 1946 lapsed and with it the Foodgrains (Licensing and Procurement) Order, 1952, also lapsed automatically. Inter-zonal restrictions on the movement of wheat and its products, the last vestiges of controls, disappeared with effect from the 18th March, 1956.

Provision for large imports.

3.13 Although during 1954 and 1955 the general supply position appeared to be quite easy, the Ministry of Food and Agriculture started exploring possibilities of regular imports on a large scale to meet the deficit in the country's food requirements that was visualised on a long-term assessment of demand and domestic supplies. In May, 1955 they initiated negotiations for the import of substantial quantities of wheat and rice from the U.S.A. under P.L. 480. Their estimate was that the country would require 8 to 10 million tons of wheat and 4 to 5 million tons of rice from abroad during the Second Plan period. The conclusion of negotiations, however, took some time. In May, 1956 an agreement was signed with Burma for the import of 2 million tons of rice during the next five years and in August, 1956 an agreement was signed with the United States of America for importing 3·1 million tons of wheat and 0·19 million tons of rice under Public Law 480 during the next three years. While the Burmese purchase was on a cash basis, the purchase from the U.S.A. was on a loan basis, repayable in 30 years.

3.14 Meanwhile, the food situation in the country had taken a rather rapid turn for the worse. The trends in prices and production during 1955-56 have been reviewed in the previous chapter. The severe damage to the jowar crop of 1955-56 has been referred to there as the main factor which accentuated the price uptrend from October, 1955, with increased pressure on the demand for and prices of wheat and other coarse grains as well.

3.15 Speculative elements took advantage of the situation and the rise in wheat prices was rather marked in Calcutta and Bombay. Government sought to keep the prices under control by releasing wheat to the market in these cities and in Delhi from their own stocks, which were about five lakh tons at the end of November, 1955. Open market sale of wheat was started at Rs. 14·50 per maund, which was Rs. 2 to 3 per maund lower than the prevailing market prices. Wheat prices in the upcountry, however, did not come down. Between January and August, 1956 over 5 lakh tons of wheat were sold. At the same time Government placed orders for wheat, mainly from Australia, on normal commercial terms to replenish its stocks. Exports of foodgrains including those of wheat products were prohibited early in 1956. It was announced in April, 1956 that Government had decided to build up a buffer stock of 2 million tons, of which 1 million tons would be wheat and 1 million tons rice.

Credit squeeze.

3.16 When the prices of wheat and jowar were rising between October, 1955 and January, 1956, rice prices showed a seasonal decline. From January onwards, however, rice prices also turned upwards. It was found that the amount of advances granted by banks against hypothecation of rice and paddy was on the increase; in April, 1956 the amount of bank credit was 100 per cent. higher than in the corresponding period of the previous year. With a view to discouraging speculative holding of stocks with the help of bank finance, in the middle of May, 1956 the Reserve Bank issued a directive to banks requiring them to increase the margins in respect of their loans against paddy and rice and to refrain from granting fresh advances in excess of Rs. 50,000 against this security. Demand documentary Bills were subsequently exempted from the purview of the directive as these represent movement of crops and it was not the intention to hinder such movement. By the end of October, bank advances had been reduced to almost the normal level. The new marketing season was also about to start. The Reserve Bank was accordingly requested to withdraw the directive to banks. The price of rice, however, remained firm and a fresh tendency to accumulate stocks with the help of bank finance soon became noticeable. As the largest proportion of credit against paddy and rice was concentrated in the two States, Andhra Pradesh and Madhya Pradesh, which had the largest exportable surpluses to other States, the importance of reimposition of credit control against paddy and rice was clear. A new directive was accordingly issued to all scheduled and two State-associated non-scheduled banks on February 9, 1957 requiring them to raise their margins by 10 per cent. and maintain a minimum margin of 35 per cent. in respect of all advances against paddy and rice. Banks were also asked to endeavour to maintain, after March 15, 1957, a level of aggregate advances not higher than 75 per cent. of the corresponding period in

1956. Despite lower production of foodgrains during 1955-56, advances against wheat, coarse-grains, gram and pulses had also risen rapidly during the second quarter of 1956. In an inflationary situation, this became a matter for concern. A directive regulating advances against wheat, gram, etc. similar to the first one on rice was, therefore, issued on September, 13, 1956.

Transition to controls.

3.17 During the first six months of the year 1956, there were no imports of rice; releases from the Union Government stocks which stood at over 5 lakh tons at the beginning of January, 1956 continued at an average rate of 50,000 tons a month. From July, imported rice started arriving in the country and the rate of release from Government stocks was stepped up. It had been hoped that the release of wheat from Government stocks in Calcutta, Delhi and Bombay would reduce the inflow of indigenous wheat into these areas and keep the prices in the rest of the country under check. It was, however, found that while the inflow into these areas of indigenous wheat, for which there was some consumer preference, continued, cheaper wheat released from imported stocks by Government in these areas was moving out. The objective of releases of Government wheat in these areas was, therefore, not being fully realised. Accordingly, these three areas were cordoned off and movement of wheat into and out of them on private account was prohibited.

3.18 The above measures were intended to augment the market supplies of foodgrains and to make effective use of limited Government stocks. Between January and October, 1956, 7·3 lakh tons of wheat and 1·7 lakh tons of rice were imported. During the same period, 7·9 lakh tons of wheat and 5·6 lakh tons of rice were released for sale. In October, it appeared that the rise in the prices of rice and wheat had been somewhat arrested. There was, however, little impression on the prices of jowar which continued to rise. Then came the Suez Crisis. The Suez Canal remained closed for all navigation between November 1, 1956 and March 28, 1957. This imparted a certain bullish trend to the wheat market and wheat prices once again started moving up. This was, however, the time for the 1956-57 kharif harvests to flow into the market. The rice crop was expected to be a bumper one. It was also felt that instead of spending scarce foreign exchange on import of rice, an attempt might be made to purchase certain quantities of rice from within the country for building up stocks. Necessary arrangements for making purchases of rice in the open market were completed in December. But contrary to expectations, the seasonal fall in rice prices was small, and no internal purchases of rice were made by the Union Government. It has been mentioned earlier that credit restrictions on advances against rice and paddy were re-imposed from February, 1957.

3.19 Government of Orissa, however, felt that they should make some purchases of rice within their State for meeting the demand which was likely to emerge later in the lean season as it did in 1956. Such purchase was, however, possible only if the Orissa State was cordoned. Accordingly, the priority of railway wagons for rice from Orissa was first down-graded and when the desired result was not produced by this measure, Orissa Government was allowed in March to impose a ban on exports of rice and they made some purchases. Meanwhile, the question of formation of rice zones also came up for consideration, but no agreed conclusion could be reached among the States concerned. Speculative hoarding of rice, however, continued and with it the rise in prices. The need for putting a curb on trade hoarding and for maintaining an even flow of market supplies became increasingly clear and pressing. Accordingly, the Essential Commodities Act was amended at the begining of June, 1957 to enable the Government to requisition by notification, stocks of foodgrains at a price calculated with reference to the average market rate prevailing in the concerned locality during the period of three months immediately preceding the date of the notification. It had been found that large quantities of rice had, for some time, been moving out of Bombay, adversely affecting the supply position in the City. On the 5th June, 1957, export of rice from Bombay was prohibited except under permit. Imports of rice were allowed to flow in as before. At this stage a further tightening up of restrictions on grant of advances by banks against hypothecation of foodgrains was effected. A stricter directive was issued on June 7, 1957 which superseded all the previous directives relating to foodgrains. It made it obligatory on banks to raise margins in respect of credit against all foodgrains to a minimum of 40 per cent. Further, for the first time as a mandatory provision, it required banks to maintain individually their level of credit against paddy and rice at not more than 66-2/3 per cent. and against other foodgrains at not more than 75 per cent. of the respective levels at the corresponding time of the previous year. This directive has been substantially complied with.

Zones return.

3.20 The ban on the export of rice which the Orissa Government had imposed in March, 1957 led to a sharp rise in prices in Bihar and West Bengal, particularly Calcutta, which normally draw their supplies from Orissa. On the 6th July, 1957, the powers delegated to the Orissa Government were withdrawn and the Union Government issued orders for local purchases of rice in Orissa and export from it under Central direction and supervision. Meanwhile, the opinion of the State Governments in the South was steadily growing in favour of the formation of a southern zone for rice. It was estimated that Andhra Pradesh had a surplus of about 6 lakh tons of rice of which 4 lakh tons would suffice for meeting the deficit in Madras, Mysore and Kerala. The remaining 2 lakh tons could be exported to

States outside the zone under permit. On the 9th July, 1957 a rice zone in the South comprising Andhra Pradesh, Madras, Kerala and Mysore was formed. Later, some quantities of rice were requisitioned in Andhra Pradesh and West Bengal under the Essential Commodities (Amendment) Act, and some purchases of rice and coarse grains were also made in some States, like Andhra Pradesh, Rajasthan, U.P. and Punjab. On the 5th July, 1957 orders were issued empowering State Governments to bring under licensing arrangement large grain merchants in selected localities and on the 9th September orders were issued bringing all Roller Flour Mills under licence with a view to controlling their purchase of wheat and manufacture and disposal of wheat products.

3.21 The new wheat crop was thriving well in almost all parts of the country till about April, 1957. In Bihar, however, the rabi crops in general and wheat in particular were severely damaged. The growth of the wheat plant was stunted and the grain was shrivelled. The wheat harvest in Bihar declined from 3,57,000 tons in 1955-56 to 1,53,000 tons in 1956-57. The decline in barley production was from 2,01,000 tons to 89,000 tons. The damage to the crops in Bihar led to a difficult food situation and supplies of wheat and rice had to be directed there as also to eastern districts of U.P. The wheat crop in the rest of the country, however, was quite good and some States had an assured surplus. But in order that abnormally large quantities should not flow out of their States and cause local scarcity and consequent rise in prices, the State Governments interested wanted to form wheat zones. Accordingly, on the 13th June, 1957 three wheat zones were formed within each of which alone was unrestricted movement of wheat permitted. These zones are (1) Himachal Pradesh, Punjab and Delhi, (2) U.P., and (3) Rajasthan, Bombay State (excluding the City) and Madhya Pradesh. Cordons around Bombay City and Calcutta were, however, to continue and the entire requirements of these cities were to be met by the Union Government.

Fair price shops.

3.22 Distribution of foodgrains by Government has been attempted largely through fair price shops. The number of fair price shops and the places in which they have been located have changed from time to time in the light of the developments in the food situation. For the country as a whole, the number of fair price shops was 18,000 in October, 1956; it rose to 20,000 in March, 1957, to 23,000 in May, 1957 and further to 29,000 in September, 1957. The additions in May, 1957 were primarily in Bihar, Bombay, Rajasthan, U.P. and West Bengal. On the other hand, there was some decrease in the number of fair price shops in May in Assam, Madras and Madhya Pradesh. The total issues of foodgrains from Government stocks during 1956 amounted to 2 million tons while in the first six months of 1957 they amounted to 1·4 million tons. During 1956, there were complaints that the fair price shops system was being abused

in certain parts of the country so that the full benefit of Government releases at lower prices did not reach the people. Cordoning off of Calcutta, Bombay and Delhi was expected to check some of these abuses. In addition, measures were taken to strengthen the inspection staff.

II

Food Production

Grow More Food campaign. 3.23 Ever since food shortage became acute in the country, there has been a growing realisation that distribution control could at best be only a palliative and that the real solution lay in the stepping up of food production. Earlier attempts by Government for increasing food production were, however, confined largely to enacting legislation and taking executive action to transfer lands from cash crops to food crops and carrying on propaganda for the adoption of more intensive methods of cultivation. It was in 1949 that the "Grow More Food" campaign received a fresh and decisive impetus in terms of the objective of attaining self-sufficiency by March, 1952, then placed before the country. The deficit to be made up by the end of March, 1952 was at that time calculated at 4·8 million tons over the level of production in 1947-48 on the basis of the then prevailing level of consumption. The target for additional production was therefore fixed on the advice of Lord Boyd Orr at 4·8 million tons under the self-sufficiency plan. Union Government's expenditure on the Grow More Food campaign was stepped up from Rs. 3·66 crores in 1948-49 to Rs. 9·76 crores in 1949-50 and Rs. 15·44 crores in 1950-51. The main steps taken for achieving the target were the undertaking of permanent works and recurring supply schemes, *e.g.*, minor irrigation works, land reclamation and the supply of fertilisers, manures and improved seeds.

3.24 These programmes for extensive and intensive cultivation, however, tended at first to be rather thinly spread all over the country as there was a general demand from all localities for schemes. Thus even when the programmes were implemented effectively and yielded benefits in the shape of additional production, these did not make a contribution to the solution of the food problem by increasing the marketed surplus substantially. Hence although the programme of self-sufficiency was announced and schemes for increasing production were being implemented on a much larger scale than hitherto, imports could not be reduced appreciably. On the other hand, in the year 1951, due to a severe drought and its effect on the food production, imports of 4·7 million tons had to be arranged from abroad.

Intensive cultivation areas. 3.25 This prompted the Government to introduce an important change of policy with regard to the Grow More Food campaign. Instead of spreading the G.M.F.

efforts thinly all over the country, an attempt was made in 1950-51 to concentrate G.M.F. efforts in compact areas called "intensive cultivation areas". The State Governments were asked to select a number of areas which had assured water supply and fertile soil suitable for intensive development. It was decided that in the case of minor irrigation schemes, compact areas should be selected and the irrigation works should be so concentrated that at least a major portion of the cultivated area was brought under irrigation and reclamation and land improvement schemes were also to be carried out only in such areas as were most suitable for this type of work. It was felt that this new policy would not only lead to a better utilisation of scarce resources but also help to augment the marketed surplus.

3.26 The programme for intensive cultivation was given a new orientation when towards the end of 1951 the Ministry of Food & Agriculture prepared a model scheme for the intensive development of groups of villages. This scheme, which was at first called the "intensive development area" project, envisaged the comprehensive development of agriculture, animal husbandry, public health and co-operation in selected groups of villages. Each of these pilot projects was to cover about 100 villages and 15 such projects were started early in 1952 with financial assistance from the Ford Foundation. A few months later the scheme of "Community Projects" was developed largely on the basis of this earlier experiment. In the Community Projects Scheme, however, much greater emphasis was given to health and education. Rural industry was also added as a new item. Every Community Project was to cover three blocks of 100 villages each. In these new Projects the emphasis was more on integrated development of community life rather than on increase of agricultural production and marketed surplus which characterised the earlier intensive cultivation areas scheme.

Relative self-sufficiency.

3.27 About the same time that the intensive cultivation areas scheme was being formulated in 1950-51, the difficulties of importing cotton and jute from Pakistan highlighted the importance of stepping up the production of these essential raw materials as well. Government decided not to slacken its efforts for stepping up food production, but supplemented the G.M.F. campaign by "grow more cotton" and "grow more jute" campaigns, all three being merged into what was called an "Integrated Production Programme" which was announced in June, 1950. The concept of "self-sufficiency" to be achieved by the end of March, 1952 was thereafter modified to that of "relative self-sufficiency" under which it was recognised that some imports might be necessary for meeting emergencies such as widespread failure of crops, for replacement due to diversion from food to other crops

like cotton and jute in the national interest and for building up of reserve stocks of foodgrains.

"Moving target". 3.28 Experience of implementing the Integrated Production Programme, however, showed that even the ideal of relative food self-sufficiency was in itself not capable of easy achievement because in practice it turned out to be a "moving target" in a country where the masses of the population were under-fed and even a small increase of production and of income led to a substantial increase in consumption. The basic assumption of a fairly stable level of food consumption which was implicit in the earlier self-sufficiency scheme was itself not valid because it was not possible even in a regime of rationing as it obtained at that time to control the consumption of large sections of the population especially the millions of producer-consumers in the country. Seasonal variations in production also turned out to be very substantial. Moreover, the new integrated production approach involved diversion of some lands, fertilisers, etc., from foodgrains to cotton and jute. Even the additional production achieved was not reflected in actual procurement as it was dispersed over large areas. The dependence on imports, therefore, continued. Moreover, the actual quantum of physical resources, *e.g.*, fertilisers and improved seeds which were distributed under the campaign was not large enough to cover more than a small proportion of the total cultivated area under foodgrains. The situation was thus obviously unsatisfactory. The Government of India, therefore, set up in February, 1952 the Grow More Food Enquiry Committee to examine the working of the Grow More Food campaign.

3.29 The Committee, which submitted its report in June, 1952, came to the conclusion that, on the whole, the Grow More Food campaign had not achieved the results expected of it. It had not aroused the expected enthusiasm or effect in the country-side. The Committee observed: "The problem of food production was a much wider one than the mere elimination of food imports. It is the bringing about of a large expansion of agricultural production that will ensure to an increasing population progressively rising levels of nutrition. Agricultural improvement is an integral part of a much wider problem of raising the level of rural life." Among the more important recommendations of the Committee were :—

(i) the setting up of a country-wide extension service organisation,

(ii) the acceleration of minor irrigation programmes, and

(iii) the provision of adequate rural credit.

First Five Year Plan. 3.30 The recommendations of the Grow More Food Enquiry Committee were incorporated into the programme

for agricultural development drawn up under the First Plan. Under the First Plan a target of 7·6 million tons of additional foodgrains (of which 6·5 million tons were to be additional cereals) was fixed to be achieved by the end of 1955-56. The Plan also envisaged substantial increases in the output of commercial crops. The target of food production proposed in the Plan was to be realised not only through the Grow More Food schemes but also through major and medium irrigation projects and through the programmes of Community Development and National Extension Service projects.

3.31 Although in the early years of the Plan the policy of concentrating efforts on intensive cultivation in selected areas with assured water supply and suitable soil was continued, subsequently, as the food position appeared to have improved, there was a shift of emphasis to community development projects. This partly followed the recommendation made by the Grow More Food Enquiry Committee for viewing the problem of agricultural development as part of the wider problem of village development. The Grow More Food campaign was of direct benefit to the cultivators who owned land. Other sections of the rural population including agricultural labour did not get any direct benefit out of this campaign. The Community Project, on the other hand, had a wider appeal. Fifty five Community Development Projects (or 165 Blocks) were started in the year 1952-53 and the number increased to 372 Community Project Blocks and 616 National Extension Service Blocks by 1955-56. From the point of view of food production, however, there was a fundamental difference between the old intensive cultivation areas and the new community projects. The objective of the former was to facilitate the procurement of surplus foodgrains. But after the relaxation of controls in 1954 and abandonment of procurement, the emphasis in the community projects shifted from increasing agricultural production and marketable surplus in selected areas to increasing the general level of production and well-being in the country as a whole.

3.32 The activities undertaken in the Community Development Projects were integral parts of programmes in the respective sectors of development with which different Development Departments in the States were concerned. As such, except for the minor irrigation programme and, to a small extent, land reclamation for which special funds had been provided in the schematic budget of the Community Development Blocks, no separate funds had been provided for other types of agricultural activities. All the essential supplies distributed, *e.g.*, fertilisers and seeds came from the programmes for the distribution of these respective supplies under the normal Grow More Food programme of the States. As Community Projects

proved to be rather expensive, a more economic model called the National Extension Block project was evolved in 1953 for supplementing them.

3.33. Although the Community Projects were supposed to be the principal agencies for creating the psychological climate necessary for increasing agricultural production, the Evaluation Reports have pointed out that in many cases the Project Officer tended to concentrate attention on works programmes at the cost of production programmes. On the whole, however, the First Plan laid a much greater emphasis on agricultural production than it had received before. The total provision for agriculture, community development and irrigation, was Rs. 807 crores and formed about 34 per cent. of the total investment under the Plan. It will not, however, be correct to assume that the whole of this amount was available for directly increasing agricultural production. It included provision for schemes of animal husbandry, forestry, fisheries, co-operation and agricultural research, training, etc. The amount actually spent on G. M. F. schemes during the five years 1951-52 to 1955-56 was Rs. 83.0 crores. Out of the expenditure of Rs. 57·0 crores on National Extension and Community Projects, a sum of Rs. 11·6 crores was specifically spent on agriculture. The actual expenditure incurred on major irrigation and multi-purpose projects amounted to Rs. 432 crores. However, they benefitted an area of only 4 million acres during the First Plan as against 8·5 million acres originally estimated.

Price policy proposed in First Plan.

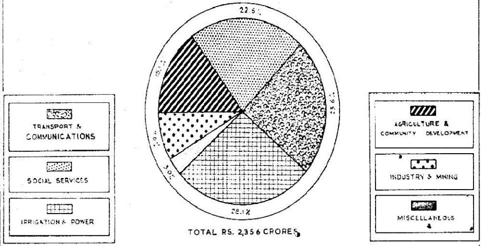
3.34 One of the most important recommendations of the First Plan was the maintenance of an integrated structure of prices. The Plan emphasised: "As regards prices, the problem is to define a level which may be considered reasonable under given circumstances, and to ensure through direct controls or through fiscal and other devices that the producer of foodgrains is not placed at an undue disadvantage. A policy of price stabilisation must have in view certain maxima as well as certain minima. At a time when the economy is subject to inflationary pressures, the emphasis is inevitably on the maintenance of the maxima. If the trend of prices is persistently downward, a system of controls with defined procurement prices can be used—and it should be used—to safeguard the interests of producers and to prevent the prices from falling unduly. Judicious purchases by Government at the defined prices are thus an excellent device for stabilising prices and for evening out, to some extent, the inter-State disparities." In practice, however, both prices and production fluctuated sharply during the First Plan period as has been described in chapter II. About the same time when food controls were being gradually relaxed, the Ministry of Food & Agriculture made certain proposals early in 1954 for the

CHART IV

DISTRIBUTION OF PLAN OUTLAY

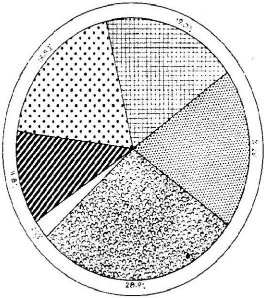
BY MAJOR HEADS OF DEVELOPMENT

FIRST FIVE YEAR PLAN



TOTAL RS. 2,356 CRORES

SECOND FIVE YEAR PLAN



TOTAL RS. 4,800 CRORES

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setting up of a buffer stock administration with a view to stabilising agricultural prices and incomes and maintaining an integrated structure of prices. It was argued that the provision of buffer stocks for important agricultural commodities supported by appropriate export, import, fiscal and monetary policies was a more desirable way of achieving the above objective than direct physical controls over prices through procurement, rationing and movement controls, especially in the situation which had developed at that time. The buffer stock administration was intended to function largely as a counter speculator in the commodity markets more or less on the same lines as the open market operations of exchange equalisation funds in the field of foreign exchange. The administration was to confine its activities to 7 commodities, *viz.*, rice, wheat, jowar, bajra, cotton, jute and groundnuts. This proposal was, however, not accepted. In fact, prices were sharply falling in 1954 and the accent was no longer on price stabilisation involving commitments both for purchase and sale at reasonable prices, but on preventing prices from falling below uneconomic levels. Government, therefore, decided to announce certain rock bottom floor prices, *viz.*, Rs. 10·00 per maund for wheat, Rs. 5·50 for jowar, Rs. 6·00 for bajra and Rs. 5·50 for maize, instead of undertaking purchase operations at such reasonable prices as would have enabled it to build up large stocks which could be used effectively in future to prevent any undue rise in prices and possibly to maintain a reasonable balance in the structure of prices. That the minimum prices fixed were unduly low is evident from the fact that very small amounts of wheat and coarse grains were offered for sale to Government at those prices, while no purchase of rice could be made at the minimum price fixed. About 76,000 tons of wheat, 38,000 tons of jowar, a very insignificant quantity of maize and about 1,300 tons of gram were all that were purchased by Government. One of the results of the sharper fall in food prices than in other prices in 1954 was that production of foodgrains fell in 1954-55 and 1955-56. Part of the fall, however, was also due to weather. Food consumption, too, was stimulated, with a time-lag. The rise in prices in 1956-57 was, therefore, partly a return swing of the pendulum.

Second Five Year Plan.

3.35 In the context of the projected trends of demand for food at the time, a target of 10 million tons of additional production of foodgrains was fixed by the Planning Commission as compared to 7.6 million tons in the First Plan. The total financial provision made in the Second Plan for agriculture and community development was Rs. 568 crores, of which Rs. 341 crores was to be spent on agriculture, Rs. 200 crores on national extension service and community projects and Rs. 27 crores on other programmes, *e.g.*, village panchayats. In addition, a sum of Rs. 381 crores was provided for executing major and

medium irrigation works under the head "Irrigation and Power". Out of the provision of Rs. 200 crores on national extension service and community projects, however, only a sum of Rs. 55 crores was to be spent on agricultural schemes. Similarly, out of the provision of Rs. 341 crores for agriculture, Rs. 170 crores were for purely agricultural programmes, the balance being ear-marked for other schemes in the sphere of animal husbandry, forestry, fisheries and co-operation. Even this amount of Rs. 170 crores was spread over both productive and other schemes of development. It is expected that a sum of Rs. 120 crores will be actually spent on food production schemes. Arrangements were, however, made to step up substantially the provision of production and marketing credit to the agriculturists.

3.36 The targets proposed under the Second Plan came up for review at a meeting of the National Development Council held in May, 1956 at which doubts were expressed as to whether the targets of food and agricultural production envisaged under the Plan were adequate. It was primarily the rising trend in prices which characterised the early months of 1956 that gave rise to these doubts. It was felt that higher rates of increase in agricultural production were essential for meeting the domestic demands, for increasing export earnings and for providing adequate safeguards against the possibility of inflation arising out of the implementation of the Second Plan with its emphasis on late yielding production schemes and schemes of economic and social overheads.

3.37 The whole question whether and to what extent the targets of agricultural production including production of foodgrains could be increased and what schemes should be undertaken to step up production to the desired level was considered at a Conference of the Union and State Ministers of Agriculture convened at Mussoorie towards the end of June, 1956. This Conference recognised the need for reviewing the targets of agricultural production proposed in the Second Plan in order to meet the domestic demands, substantially reduce imports, expand exports and provide adequate safeguards against the possibility of inflation. It came to the conclusion that with the existing financial allocations in the agricultural sector of the Plan, it would be possible to raise the target of additional production of foodgrains from 10·0 to only 10·8 million tons. It was felt, however, that scope existed for raising the targets of food production from 10·0 million tons to 16·4 million tons during this period provided additional allocations of funds were made under the Second Plan. It was estimated that an additional sum of Rs. 116 crores would be needed for achieving this higher target.

Revision of targets.

3.38 The Planning Commission which considered the proposals made by the Mussoorie Conference could not agree

CHART V

DISTRIBUTION OF PLAN OUTLAY

AGRICULTURE & COMMUNITY DEVELOPMENT

NATIONAL EXTENSION COMMUNITY DEVELOPMENT

AGRICULTURAL PROGRAMMES

ANIMAL HUSBANDRY

FISHERIES

MISCELLANEOUS

LOCAL DEVELOPMENT WORKS

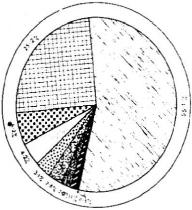
VILLAGE PANCHAYATS

CO-OPERATION

FORESTS

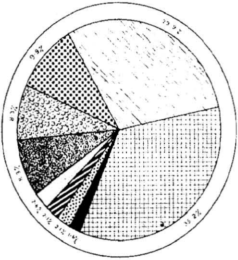
PERCENTAGE INCREASE IN SECOND PLAN OVER FIRST PLAN = 59·10

FIRST FIVE YEAR PLAN



TOTAL RS. 357 CRORES

SECOND FIVE YEAR PLAN



TOTAL RS. 568 CRORES

to increase the allotment for agriculture. The Commission proposed that the higher targets should be achieved by accelerating some of the programmes of development although it recognised that at later stages, it might be necessary in some instances to make small additions to the allotments for agriculture through internal adjustments or otherwise. With this policy in view, the Planning Commission converted a series of meetings and held discussions with individual States at which the proposals for increasing agricultural production of each State were reviewed. As a result of this review, the target of additional food production was raised to 15·5 million tons as compared to the original target of 10 million tons. Priority was given to such schemes as were relatively less capital-intensive. The target also took into account separately additional production expected from the introduction of improved agricultural practices which had been deliberately left out of the estimate of production-potential included in the First Plan. In July, 1956, a small delegation was sent to China to study the schemes and programmes the Chinese authorities were adopting for increasing the productivity of agriculture. Among the important recommendations made by this delegation were that an all-out effort should be made to develop local manurial resources such as farm-yard manure, night-soil, green manure, etc., as well as utilisation of chemical fertilisers on a much larger scale than at present. Strengthening of agricultural staff at the various levels in N.E.S. and C.D. Blocks, organisation of a larger number of demonstration and training centres, reducing the jurisdiction of the village level worker, agricultural education, mobilising popular co-operation, enforcing minimum standards of land management, setting targets of additional production-potential for individual districts, blocks and villages, using best farmers in each area as a cadre of non-official agricultural leaders, ensuring better coordination between research and extension workers, adequate provision of short and medium term credit, intensifying co-operative production, marketing etc., are some of the other recommendations. It also suggested that in the interests of agricultural production it was essential that minimum prices for the principal agricultural crops including foodgrains should be assured to the cultivators.

Agricultural production and N.E.S.

3.39 There was a growing feeling that unless agricultural production was given the highest priority in the National Extension and Community Development programme, it would not be possible to achieve the higher targets of agricultural production. The role that should be played by the National Extension agency in increasing agricultural production was discussed in detail at the Sixth Development Commissioners' Conference held towards the end of April, 1957. This Conference recommended that a blockwise break-up of additional production should be aimed

at and the minimum increase in production during the next three years should be of the order of 50 per cent. over the present figure in irrigated areas and in areas of assured rainfall and 30 per cent. in the remaining areas, the first year accounting for at least 20 per cent. increase. Each village in a block should have an agricultural plan and targets for each item of agricultural production should be worked out on the basis of the funds available from all sources. Every block should have an agricultural programme of additional production and the increase should be not only in major crops like wheat and rice, but in overall agricultural production including cash crops like jute, cotton and oil-seeds. The Conference also made a number of recommendations in respect of detailed aspects of the programme regarding demonstration, minor irrigation works, programme of reclamation, area under improved seeds, use of fertilisers and better quality of compost. It also suggested that every acre of land should be covered with better methods of cultivation, particularly line sowing.

Minimum prices.

3.40 As regards minimum prices, the Ministry of Food & Agriculture had put forward proposals towards the end of May, 1957 for fixing reasonable minimum prices for important agricultural commodities. It was urged that agricultural price support was in the nature of an insurance measure analogous to unemployment insurance and minimum wages in industry and, as such, had great economic and psychological value; that the minimum price should not be uneconomic to the producer; and that it should definitely encourage production especially of commodities for which higher targets had been fixed in the Plan. It was emphasised that whenever a reasonable minimum price had been guaranteed as in the case of cotton and sugarcane, production had increased steadily and substantially. The National Development Council at its meeting held on 3rd June, 1957 considered the question of minimum prices for agricultural commodities and agreed that minimum prices for foodgrains should be fixed and that the levels of prices to be announced for the kharif season should be considered by a Committee of Central and State Officials. It was also generally agreed that any minimum prices which were fixed should not be distress prices and that they should be at levels which would give the cultivator a reasonable degree of assurance that he could safely invest in agricultural improvements. The recommendations of the Committee of Central and State Officials and the National Development Council were considered by the Government and after a reference to the Standing Committee of the Panel of Economists attached to the Planning Commission it was decided that when prices were running high, as they are at present, it was not necessary to fix and announce minimum prices for agricultural products. However, Government issued a Press Note on 14th

June, 1957 assuring the agriculturists that the prices of foodgrains and other agricultural commodities would not be allowed to fall below economic levels and that Government would take suitable steps from time to time to this end.

CHAPTER IV

ANALYSIS OF FACTORS IN RISE IN PRICES

I

Basic Causes

4.1 The causes of the rise in prices in the last two and a half years may be broadly classified as (a) general factors and (b) specific factors. Under general factors may be considered the broad forces—monetary and non-monetary—operating on the price level as a whole including prices of food as well as non-food articles. The specific factors would relate to foodgrains or cereals in particular and may be further classified as (i) factors on the demand side, and (ii) factors on the supply side.

General factors. 4.2 The most important general factor recently in operation in the economy has been the increased tempo of investment since 1955 in both the public and private sectors. The plan investment really started gathering momentum from 1955-56. As against Rs. 343 crores in 1953-54 and Rs. 476 crores in 1954-55, the plan investment went up sharply to Rs. 667 crores in 1955-56 and Rs. 761 crores in 1956-57 and is currently running at a budgeted rate of Rs. 900 crores. Much of the increase in investment in the public sector has been deficit-financed, though part of it has been covered by taxation and borrowing from genuine investors. The volume of deficit-financing went up from Rs. 78 crores in 1953-54 and Rs. 93 crores in 1954-55 to Rs. 180 crores in 1955-56 and Rs. 253 crores in 1956-57. An expanding volume of public investment financed to a considerable extent through an inflationary gap in budget receipts has been the most important element in the general inflationary climate. At the same time, there has occurred an increase in the volume of bank credit which is the private sector's equivalent for deficit-financing in the public sector. From the initial level of Rs. 494·2 crores at the end of 1953-54 bank credit has risen progressively by Rs. 58·9 crores in 1954-55, Rs. 79·4 crores in 1955-56 and Rs. 149·2 crores in 1956-57. Significant expansion of bank credit helps to sustain or aggravate price rises both generally and in specific sectors of the economy, and the proportionate influence of net additions to the volume of bank credit in stimulating price increases is not to be rated lower than that of deficit-financing: the additional money created by banks is about the most active constituent of money-supply and directly raises aggregate demand. On the other hand, much bank borrowing is essentially short-term and self-liquidating and finances an increased

flow of production. Deficit-financing and credit expansion are the two primary factors accounting for increase in money-supply; on the other side, the principal factor which causes a monetary contraction is the deficit in balance of payments. Upto 1955-56 there was a small favourable balance in international payments every year. From 1956-57, the balance of payments has turned strongly adverse, the deficit in that year being Rs. 293 crores. In the current year, 1957-58, the balance of payments deficit continues at much the same rate. The net result of these expansionary and contractionary factors has been reflected in an accelerated increase in money-supply which has increased by Rs. 126·6 crores in 1954-55, Rs. 263·7 crores in 1955-56, Rs. 128·6 crores in 1956-57 and declined by Rs. 72·7 crores from April to August 1957. The money-supply has thus gone up from Rs. 1794·0 crores on 31st March, 1954 to Rs. 2240·2 crores on 31st August, 1957, or an increase by 24·9 per cent. in three and a half years. Besides, the money-supply is much more active now than it was some years ago. There is no index of velocity of circulation available in respect of the bulk of money-supply which takes the form of currency circulation. But in regard to bank money a reliable indicator of the rate of monetary turnover is to be found in the figures of total bank debits in relation to demand deposits which are now published by the Reserve Bank. There is no basis for assuming that the velocity of currency circulation corresponds to the turnover of bank money. The latter is, however, of interest as indicating the relative activity of one-third of the money-supply and perhaps as a partial clue to the direction of change in the activity of the entire money-supply. The figures since 1950 are as follows:—

Turnover of Bank Money in India

(Rs. in crores)

Year	Bank deposits	Bank debits	Turnover of bank money
1950	437·1	13696·8	31·3
1951	462·0	17570·4	38·0
1952	406·4	15790·5	38·9
1953	381·6	15117·4	39·6
1954	395·3	16847·2	42·6
1955	363·4	16437·3	45·2
1956	393·9*	18004·5*	45·7*

* Provisional.

It will be seen that the turnover of bank money has steadily increased from 31·3 in 1950 to 45·7 in 1956. In fact, study of figures over 20 years indicates a gradual fall in velocity from 41·2 in 1937 to 22·0 in 1944 and a steady rise thereafter.

4.3 The monetary factors making for a general rise in prices have to be considered together with the non-monetary factors, the principal of which would be the trend of production during the period. This is indicated by the real national income, which showed a very small increase of 1·36 per cent. in 1955-56 followed by a more substantial increase of 6 per cent. in 1956-57. To some extent, an increased volume of money supply is also required to sustain the same level of prices owing to the steadily expanding boundaries of the money economy or the gradual extension of what is termed the monetised sector of the economy and the resulting increase in the demand for money. This has been placed at about 1 per cent. per annum, but may well be significantly larger owing to the large expansion, *e.g.*, in the sector of bank-financed transactions. This is, at any rate, likely to be a somewhat variable or discontinuous factor.

4.4 While the order of magnitude of the various factors on either side mentioned above furnishes a clue to the movements of the price level, it is difficult to establish precise correlations owing to inadequate information regarding some of the elements determining the general price level, inadequate measurement of the price level, importance of psychological factors, ramifications of regional incidence of the numerous factors involved, and in particular the existence of a variable time-lag in the operation on the price-level of the various monetary factors. On the whole, a large part of the rise in the general level of prices may be ascribed to a general increase in demand resulting from the increase in investment expenditure on public and private account accompanied by deficit-financing and credit expansion, during the last few years. Deficit-financing and credit expansion, however, have also been associated with a certain increase in production activity (as seen from Charts I & II). The increase in production has tended to moderate and absorb the inflationary impact of investment expenditure to a considerable extent, and the rise in prices would have been greater but for the increase in production.

4.5 All the general factors referred to above cannot but lead to a significant rise of prices in consequence of the rate of economic development and its mode of financing. The experience of India in this regard is in conformity with that of a number of European and Asian countries during the last two or three years when there has been a general rise in prices almost all over the world as we have observed in Chapter II. Inflationary trends in India during this period, therefore, were by no means an isolated phenomenon. The effect of the general inflationary

forces, however, will be different on different commodities, depending upon their relative demand and supply situations and effectiveness of any controls in operation. It is to a consideration of the specific factors on the demand and supply sides respectively for foodgrains that we now turn.

Prices of foodgrains: factors on the demand side.

4.6 The general inflationary forces referred to above have also tended to manifest themselves through various factors on the demand side for foodgrains. The problem of demand is not merely to be considered in over-all terms in relation to all commodities but also in terms of changes in purchasing power and consumption patterns of different sections of the population in relation to particular commodities and of propensity of traders as well as consumers to maintain stocks. Some of the relevant factors bearing on the demand for foodgrains during the period of rise in prices under examination are: (a) a steady increase in purchasing power of the public during this period as seen from Chart I; (b) some possible shift in the distribution of national income in favour of lower income brackets of the population for estimating which no precise basis is available, but which is indicated by the general pattern of disbursements of investment expenditure with resultant additional employment; and (c) the high income elasticity of demand for foodgrains of the bulk of the Indian population who live on the marginal level.

Propensity to consume

4.7 We have been told by various witnesses that in recent years there has been a change both in the volume and pattern of food consumption of many sections of the people. The system of rationing had converted many who formerly used to live on coarse grains to eating rice and wheat. When rationing was abolished a certain increase in the consumption of rice and wheat probably tended to remain, though there was some shift back to coarse grains. For instance, we were told by the representative of the Tea Association in Assam that the tea garden labourers no longer accept the coarse rice which they used to eat in the old days. Similarly, we were told in Orissa that the mining labour now-a-days insists on having better quality rice. In other areas we understood that people who used to live on roots like tapioca or sweet potatoes are now transferring their demand to millets or coarse rice and people who used to take millets formerly are now gradually shifting over to rice or wheat. Such analysis of statistical evidence as we have been able to make does not, however, indicate that changes in food habits are of substantial magnitude over the short period.

4.8 Certain data collected by the National Sample Survey show that with the increase in the levels of income, consumption of foodgrains *per capita* has increased substantially in the lower income brackets while remaining fairly stable in the middle income groups. In fact, in a country

like India where the vast majority of the people are undernourished it will be surprising if consumption did not behave in this manner. The per adult availability of food in India amounts only to 2,200 calories as against an estimated 3,000 calories that are required by minimum nutritional standards. Even this average is misleading because there are large sections of the population who hardly get 1,200 to 1,500 calories per adult per diem. With even a small increase in income the first demand of the underfed people is naturally for more foodgrains. An increase in consumption by half the population by 1 oz. more of cereals *per capita* per day would put up the total requirement by over 2 million tons.

Urbanisation.

4.9 The increasing tempo of industrialisation and urbanisation in the country has also had its effect on the consumption of foodgrains; this subject is dealt with at greater length in the next chapter. One effect of these developments is to increase the demand for marketed surplus but another is also to increase the demand for rice and wheat as against millets and minor foods. It may be noted here that during the First Plan period if the consumption of foodgrains has gone up by about 14 per cent. that of several other consumer goods has gone up to a much greater extent (See Chart VI).

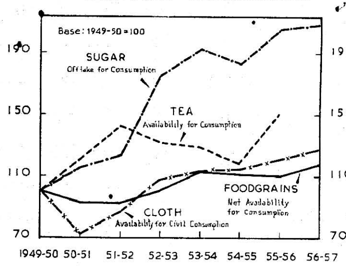
Propensity to stock.

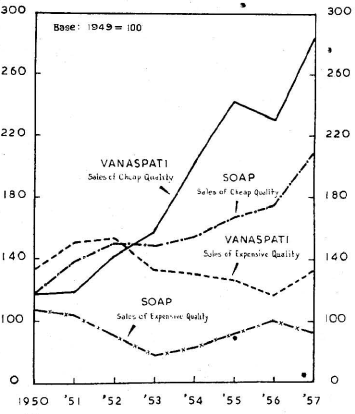
4.10 But changes in the demand for consumption was not the only factor on the demand side. Perhaps from the short-term point of view changes in the propensity to stock were even more important. As has been mentioned in Chapter II, stocks had probably fallen to very low levels by the middle of 1955. As the expectation of fall in prices was replaced by an opposite expectation, traders would have started once again to build up their normal pipe-line stock. This operation coincided with a phase of low production and rising development expenditure. As the expectation of a continued rise in prices was confirmed, there was a tendency to an increase in stock-building by the trade even beyond the levels which could be called normal. In this the trade was assisted by the credit supplied by commercial banks. For instance, advances given by scheduled banks against foodgrains increased from Rs. 18·85 crores in May, 1955 to Rs. 38·67 crores in May, 1956 and Rs. 42·52 crores in May, 1957. The corresponding figures for paddy and rice are Rs. 10·8 crores, Rs. 22·5 crores and Rs. 21·6 crores, and for wheat, coarse grains and pulses Rs. 8·0 crores, Rs. 16·1 crores and Rs. 20·9 crores, respectively. The figures of quantity of stocks pledged or hypothecated with banks* for the three years respectively are for paddy and rice 492·9 thousand tons, 815·2 thousand tons and 647·0 thousand tons, and for wheat 78·2 thousand tons, 79·6 thousand tons and 94·2 thousand tons. In 1955-56, most of the stock-building was no doubt

*The figures relate to 20 scheduled banks which represent approximately 60 per cent. of the total credit extended by scheduled banks as a whole.

CHART VI

INDICES OF AGGREGATE CONSUMPTION OF SELECTED COMMODITIES*





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done by traders. But in 1956-57 there was a significant change and a large part of the stock-holding was done by big and medium producers as well. But this factor affected marketed surplus and hence the supply rather than the demand side, and is dealt with later in this chapter.

4.11 Although hoarding by consumers in the sense of laying in of stocks in anticipation of expected shortages or rise in prices cannot be over-looked as an operative factor on the demand side under present conditions, this tendency did not perhaps assume any significant dimensions during the period under review so far as the urban consumer was concerned. On the other hand, the rural consumer who is also a producer or is otherwise able to hold grain is liable to react more readily to the stimulus of a definite expectation of rise in price. A certain increase in the demand for foodgrains is inevitable in a developing economy but there also appears to have been a more pronounced tendency to build up larger stocks by traders, producers and consumers in view of the abnormal instability of prices.

Speculation

4.12 Speculation as such should perhaps be more appropriately regarded as an aggravating factor in the recent rise of foodgrains prices rather than as an initiating factor. Speculation in commodities flourishes under conditions of instability when it pays traders to withhold stocks from the market in anticipation of further rise in prices. This usually happens when there are expectations of a fairly sustained tendency to rise in prices. In view of the large-scale investment and deficit-financing envisaged under the Second Plan, a certain amount of speculative rise in prices must be regarded as a natural consequence. Wide variations in prices in space as well as in time have also strengthened speculative elements in the economy. Prices in neighbouring countries like Pakistan, Goa, Ceylon, etc., have been much higher during this period than in India. There has, therefore, been a temptation to smuggle certain quantities of cereals out of the country. It has not been possible for us to collect any reliable figures about the quantities involved. They may not have been large in 1956-57, but rumours that certain quantities were being smuggled out of the country and were being sold abroad at high prices added to the bullish sentiment in the market.

Factors on the supply side.

4.13 While general inflationary forces as well as factors operating specifically on the demand for foodgrains accentuated the rising trend in prices, changes in the supply situation of individual crops usually initiated the uptrend in prices of particular foodgrains in different periods and in different regions. The supply factor has to be considered in relation not merely to over-all production and net imports of all foodgrains taken together but also to

marketed surplus of different types and varieties of foodgrains in different periods of the marketing season and in different areas. It is, therefore, necessary to examine carefully factors affecting production, marketed surplus as also imports.

Production

4.14 The following table gives the estimates of production of foodgrains after making necessary adjustment for changes in coverage and statistical techniques for the years 1953-54 to 1956-57, as explained in Chapter I.

Adjusted Estimate of Production of Foodgrains in India

(Million tons)

Year	Rice	Wheat	Other cereals	Total cereals	Pulses	Total food-grains
1953-54	28·26	7·88	22·17	58·31	10·56	68·87
1954-55	25·14	8·78	22·21	56·13	10·98	67·11
1955-56	26·85	8·57	19·05	54·47	10·82	65·29
1956-57	28·14	9·07	20·04	57·25	11·44	68·69

It will appear from the above table that there was a fairly sharp fall in production, especially of coarse grains in 1955-56. Production of cereals no doubt increased substantially in 1956-57, but the total production of the two years 1955-56 and 1956-57 taken together was 2 million tons less than the total production of the two preceding years 1953-54 and 1954-55 as against the continuing increase in demand every year.

4.15 In view of the recent rise in prices some people doubt whether the increase in production in 1956-57 had in fact taken place. The results of some special field investigations carried out on our behalf by various research institutions, over and above our observations and enquiries in the course of our tour of the country, however, seem to confirm that an increase in production in 1956-57 over 1955-56 did take place. For instance, special surveys carried out on our behalf by the Programme Evaluation Organisation of the Planning Commission, the Agro-Economic Research Centres and other non-official organisations show that the production of foodgrains in 1956-57 has been, on the whole, higher than in 1955-56. The only States where production has been reported in the special surveys to be lower in 1956-57 than in 1955-56 are for rice: parts of West Bengal and U.P.; for wheat: Himachal Pradesh and Bihar; and for millets: Mysore, Rajasthan, parts of Bombay and Madhya Pradesh. A comparison with official statistics for these States shows that these are also

the areas for which the official production figures show a decrease in 1956-57 over 1955-56. There is, in fact, broad correspondence between changes in production as revealed by official statistics and as disclosed by the special surveys for these two years.

4.16 We must, however, point out here, as explained in Chapter I, that the actual increase in production during the First Plan period, *i.e.*, in 1955-56 over 1949-50 was of the order of 13·7 per cent. or roughly 7·3 million tons of foodgrains as indicated by production indices and not 20·8 per cent. as indicated by the unadjusted figures of production. The increase of 7·3 million tons during the First Plan period does not appear to compare unfavourably with the target of 7·6 million tons. It should, however, be recalled that the latter was essentially a target of additional production-potential and not of actual additional production. In practice, the additional production-potential created during the First Plan period amounted to 5·16 million tons only.

4.17 The achievement of additional production-potential (5·16 million tons) was thus only 68 per cent. of the target (7·61 million tons). But the actual difference in production between the first and last year of the First Plan period was, as stated above, roughly 7·3 million tons. The difference of 2·14 million tons (7·3 — 5·16) must, therefore, be ascribed to increase in the area under foodgrains which became possible with the end of the long spell of drought in 1953-54 and to possible adoption of improved techniques by the cultivator for which credit has not been taken in the figure of 5·16 million tons of additional production-potential given above.

4.18 There was a fall in production of millets to the tune of over 3 million tons in 1955-56. It was this fall which initiated the price uptrend in the autumn of 1955. The prices of millets rose sharply at first. As a result, there was an increased pressure of demand both on rice and wheat. Because production of wheat was slightly lower in 1955-56 than in 1954-55 and stocks of wheat with Government were also very low, prices of wheat started to rise earlier. The production of rice was about 1·7 million tons better in 1955-56 compared to 1954-55 and the Government also was in a position to pour larger stocks into the market. Therefore, in the earlier months of 1956 the price of rice did not rise sharply. It was only when stocks of rice with Government fell to very low levels and the rising trend in prices induced larger holding of stocks by traders as well as producers that the rise in the price of rice became serious from the summer of 1956. In 1956-57, there was an increase in the production of rice, wheat as well as millets. But the production of millets was still over 2 million tons lower than in 1954-55. Hence, the pressure on rice and wheat from the normal consumers of millets continued

during that year too. Larger supplies of wheat were available from imports and, therefore, the rise in wheat prices was relatively less towards the end of 1956-57. As regards rice, prices at first showed a declining trend in 1956-57 as crop prospects were good but tended to firm up in the earlier months of 1957 as it became clear that the market arrivals were slower than usual and that stocks with the Government were also low.

Marketed surplus.

4.19 It is variations in marketed surplus even more than variations in production which are important from the point of view of prices. Unfortunately, the information available about marketed surplus is very sketchy. There are, no doubt, some broad estimates available for certain pre-War and post-War years which show a substantial fall between those years. But the accuracy of these figures is open to serious doubt. Moreover, they do not give any reliable picture of year to year variations in actual market supplies. We have been told that recently a scheme for collecting the necessary data of market supplies on a country-wide basis has been taken up by Government but that it will take two or three years before any useful data are available. Partly perhaps in consequence of this lack of data many people tend to equate variations in production with variations in market supplies: which is highly misleading. On *a priori* grounds it may, of course, be said that if the production increases and prices fall marketed surplus will increase more than proportionately, owing to the tendency to de-hoarding initiated thereby. Similarly, if the production falls and prices rise, marketed surplus will decrease more than proportionately, owing to the stimulus to greater hoarding imparted thereby. But a situation may arise, with prices and production moving in the same direction, when marketed surplus may behave quite erratically.

4.20 Although no comprehensive data on actual market arrivals are yet available from official agencies, we have been able to collect some data for the last two years through surveys carried out by the Programme Evaluation Organisation, Agro-Economic Research Centres, Farm Management Centres and the Reserve Bank. The broad picture that emerges from these data is that the marketed surplus of rice was lower in 1956-57 compared to 1955-56 in some parts of West Bengal but was higher in other parts of that State and also in Andhra Pradesh, Mysore, Kerala, Rajasthan, Punjab, Orissa and Assam; the marketed surplus of wheat was lower in Himachal Pradesh, Bihar, Orissa, West Bengal and U.P., but was higher in Punjab, Bombay, Madhya Pradesh and Rajasthan; the marketed surplus of millets was lower practically in all States. There was, however, a substantial change in the pattern of marketing during 1956-57. Market arrivals immediately after the harvest were much lower than in the previous year, but were appreciably higher in the lean season. Data available

from most sources show that stock-holding at the farm level has increased considerably in 1956-57 as compared to 1955-56. Less than 60 per cent., and in some areas even less than 50 per cent., of the crop came to the market in 1956-57 within two or three months of the harvest as compared to 70 to 80 per cent. in normal years. Sales in the middle, and to some extent even in the end, of the season became relatively more important.

4.21 In this context the figures given in Appendix VI collected from the regulated markets of Nizamabad, Mehboobnagar and Warangal districts of Andhra Pradesh for the last 4 years are of some special interest. These figures show that the market arrivals generally increased in 1954-55 over 1953-54 as prices fell, even though production in Nizamabad and Warangal declined. In the subsequent two years arrivals either fell or showed an increase which was proportionately less than the increase in production. This shows that the substantial rise in price in 1955-56 and 1956-57 did not have the effect of bringing into the market the additional supplies produced on the farms. It is possible that the fall in prices in 1954-55 forced the producer to sell more to obtain the requisite cash income with which to procure non-farm goods.

4.22 Possible explanations of why during 1955-56 and 1956-57 market arrivals declined or did not increase substantially are: (a) that the producers consumed more than before, (b) that a tendency for holding grains for a longer period than usual developed in anticipation of further rise in prices and (c) that the producers' need for cash to meet necessary commitments could be fulfilled with lower sales. Contrary as this may seem to normal producer response, the above reasons account for the situation in which more produce is marketed when prices fall and less is marketed when prices rise. This is particularly likely to happen in a country where for most of the farmers the surplus is at best a marginal one, there is a high income elasticity of demand for foodgrains and, in the economist's jargon, the income-effect of a change in price on consumption tends to be stronger than the substitution effect.

4.23 A likely reason for (a) and (b) in the last paragraph would be that the rise in prices of cash crops as also of food crops in recent years has improved the gross earnings of the agriculturists and increased their capacity to hold foodgrains for a longer period, especially as, as explained above, they could now meet their contractual obligations for cash payments by selling smaller quantities of their produce.

4.24 There has also been an increase in the advances made to cultivators by Government, co-operative banks and commercial banks. Though the loans given by Government and co-operative banks are still relatively small and it is not

likely that these loans have helped to any appreciable extent in stock-holding by producers except in a few areas, in general an increase in the availability of credit directly and significantly enhances the cultivator's holding power. As regards commercial banks there has no doubt been a substantial increase in the advances given by them against foodgrains, as has been noted earlier, but most of these advances were given to traders. In some areas, however, the traders in their turn have given fairly large advances directly to big and medium holders. In the main, however, the improvement in the capacity of the agriculturist to hold his produce resulted from the increase in his income rather than by virtue of additional credit facilities.

4.25 As a result of abolition of Zamindari and in view of the proposed tenancy reforms many intermediaries have now become owner-cultivators. These erstwhile intermediaries who have evicted many of their small tenants are now medium cultivators who have better holding power than small farmers who have been evicted. Moreover, investment preference among the large farmers and the ex-intermediaries seems to have undergone a change since the initiation of land reforms. There is a tendency now to invest in stocks of grains with a view to taking advantage of these seasonal rises in prices. Even small farmers are known to have stored their surplus grain for a longer period in 1956-57 than in 1955-56.

4.26 In 1955-56 prices declined in the earlier part of the year after harvest when cultivators sold out the bulk of their grain, but rose sharply later. In 1956-57, therefore, cultivators became more cautious and tried to reduce sales in the earlier part of the season in expectation of a repetition of the experience of 1955-56 during a general inflationary situation. By acting thus in 1957 the cultivator only conformed to a long-accepted objective of agricultural credit and economic policy, which has been to improve his staying power with a view to preventing distress sales by him immediately after the harvest with a consequent sharp drop in prices. This use to be followed by a sharp rise in the lean season thus mulcting the cultivator of the bulk of the profit which went to the middle man. From the over-all point of view, therefore, the experience of 1956-57, though somewhat dismaying at first must be regarded, on the whole, as salutary. This is brought out in particular by the marked difference in seasonal price behaviour between 1956 and 1957. Whereas in 1957, prices of cereals did not show their normal dip at harvest, they have also not risen as appreciably as they did last year in the period after the harvest as the cultivators have staggered sales over the lean months. Slower market arrivals have, therefore, not been an unmixed evil, having acted to some extent as a stabilising factor.

Imports

4.27 Import is another important factor on the supply side. Imports of foodgrains were at a peak level in 1951

when about 4·7 million tons were imported into the country. They remained at a comparatively high level in 1952 when 3·9 million tons were imported. Subsequently with increased production in the country and fall in prices the level of imports came down and in 1954 and 1955 they were progressively reduced to 0·8 and 0·7 million tons respectively. But when towards the latter half of 1955 food prices began to rise, Government stepped up its programme of imports which reached the figure of 1·4 million tons in 1956. With continued deterioration in the food situation and availability of supplies from the U.S.A. under Public Law 480 it is expected that about 3·7 million tons will be imported in 1957. Thus there has been a considerable variation in the size of imports. Imports form the quickest and most effective means of bringing pressure to bear on internal prices, but their contribution to a solution of the food problem is necessarily limited for some years, in the difficult foreign exchange situation of the country, to what supplies can be arranged under U.S. Public Law 480, over and above the requisite minimum of normal commercial imports.

Availability.

4.28 Taking production, imports and releases from Government stocks as a whole, the *per capita* gross availability of foodgrains in the country has been as under:

Year	Gross Production (Adjusted) (Million tons)	Import (Million tons)	Change in stocks (Million tons)	Exports (Million tons)	Gross availability (Million tons)	Population (million persons)	Gross availability per capita per day (Oz.)
1954 .	68·87	0·81	(—)0·17	(—)0·01	69·50	377·1*	18·1
1955 .	67·11	0·71	(+)0·74	(—)0·19	68·37	382·4*	17·6
1956 .	65·29	1·44	(+)0·61	(—)0·06	67·28	387·4*	17·1
1957 .	68·69	3·72	(—)0·66	Nil	71·75	392·4*	18·0

4.29 It will be seen that the gross availability *per capita* declined from 18·1 oz. per day in 1954 to 17·1 oz. per day in 1956. No doubt, in 1957 the gross availability *per capita* is likely to be almost the same as in 1954. But, if one takes into account the increased retention by the agriculturists that seems to have taken place in the year 1956-57, it is likely that the net availability *per capita* for the non-farm section of the population will have declined.

The nature and causes of the price rise : a summary.

4.30 The above discussion shows the rise in prices since the middle of 1955 was essentially an outcome of monetary and other general factors inter-acting on certain special factors

*Estimated mid-year population obtained from the Office of the Registrar General.

pertaining to the demand and supply of foodgrains. The general factors created an atmosphere conducive to an uptrend in the price level. The factors on the demand side primarily reflected similar influences in so far as foodgrains were concerned. With a situation thus generally favourable to a rise in the prices of foodgrains it was first the shortfall in production and later the slowing down in market arrivals which released the spring, as it were, and pushed the prices of foodgrains sharply upwards from the low levels to which they had fallen in 1954-55. It was first a failure of the millet crop in 1955 which started the rise. However, but for a failure of the same crop again in the following year the actual rise in prices would have been perhaps much smaller. Even the failure of two successive millets crops would not have produced the effect that it did unless the inflationary forces were there already at play in the economy. Even in normal times there are seasonal falls and rises in prices. Similarly, local fall and rise in prices or failure of one or the other food crop also are not unusual in our economy. But when any of these things happened in the background of a buoyant trend in the general price level caused by inflationary forces, a rise in the price of a particular grain, whether due to seasonal factors or local crop failures or governmental purchases, tended every time to leave a residue behind it as it were, a residue which usually tended to spread itself to other grains also. The effect of comparatively large sales by Government in repressing a rise or producing a fall in prices was less marked than the effect in the opposite direction of small purchases, as in the winter of 1956. Similarly, when there was a rise in price in a particular area due to local scarcity it gradually spread to other areas. In the autumn of 1955, for instance, the price of jowar jumped from Rs. 5 to Rs. 10 in eastern Rajasthan and western Madhya Pradesh when the local jowar crop failed and it soon spread to other parts of the country. Similarly, in the summer of 1957 when the wheat crop failed in Bihar there was local distress which gave rise to something of a scare that pushed up not only the prices of wheat in Bihar but also of other foodgrains in the region. Again, during the rainy season of 1957, when following the imposition of ban on movement from Orissa and Andhra Pradesh prices rose sharply in Calcutta, this metropolis sucked away available rice from the neighbouring districts of West Bengal creating distress in the rural areas.

Epicentres of price rise.

4.31 There were in fact a number of areas in the country from which scarcity conditions were reported from time to time and which at one time or other became the epicentres, as it were, of price rise for the neighbouring region. The publicity given to stories of distress attendant upon emergence of scarcity often started scare which set in process the familiar vicious circle of speculative hoarding and price increases. Under normal conditions this process could not have persisted in face of the technical demand and supply

position. In an inflationary situation, however, the role of expectations increases and the price tends to settle at a level higher than what would be warranted by purely technical demand and supply factors.

Scarcity areas.

4.32 The scarcity pockets mentioned above may be broadly classified into four main types. Firstly, there are areas like eastern U.P. and northern Bihar which have a very dense population, extremely small holdings and low *per capita* income, and are mainly paddy-growing areas with heavy rain-fall and subject to frequent floods and other natural calamities. In these areas the rural people live in a precarious condition and when either floods come or rains fail, there is acute distress. In the lean season, prices tend to spurt up even on slight disturbance making these areas epicentres for further rise in prices in neighbouring areas. Secondly, there are areas like the districts of West Bengal near Calcutta with similar economic and demographic conditions where the disturbing factor is often the pressure of demand supported by high purchasing power from the neighbouring metropolis whenever prices there tend to go up for any reason. Thirdly, there are the dry areas, *e.g.*, some of the millets growing areas of western India and the Deccan plateau which have relatively sparse population with scanty rainfall. The yield of land in these areas is usually poor and the income of the farmers is also amongst the lowest in the country. These areas are subject to frequent drought which initiates the usual vicious circle of failure of crops followed by rise in prices, scare amongst the people, hoarding and further rise in prices. Lastly, there are the tribal areas, *e.g.*, in Assam or Central India, where *per capita* income is low, transport cost is high and the economy is not only primitive but also often isolated from the rest of the country. Any failure of the local crop leads to unusual distress in these areas.

4.33 It is, however, primarily the first three types of scarcity areas where the first signs of difficulty manifest themselves. To the extent that corrective action is taken in time, scare and panicky rise in prices can be prevented. On the other hand, to the extent that there is delay in taking action in these areas even a small shortage may lead to a disproportionate rise in prices and consequent hoarding and fall in market supplies especially when general conditions are inflationary.

4.34 In a developing economy like ours there is always the risk that disparities of various types will tend to get aggravated unless special care is taken to even them out. Prices may rise faster at times due to a temporary imbalance of supply and demand. With a quickening pace of development, these disparities are likely to become greater. It should, therefore, be an object of Government policy to keep a careful watch over likely development of such disparities and take timely action to minimise their harmful effects.

II

Retrospect

4.35 The review of the food situation and food policy and the analysis of factors in price rise given in this and the last two chapters enables the problem of fluctuations in prices to be seen in perspective and makes it difficult to resist the conclusion that the likely implications of economic development have been inadequately assessed. Economic prescience has also been slow to develop. Shortcomings of policy were often partly due to pre-occupation of Government with current issues to the comparative neglect of longer-term considerations or to the inter-actions of different policies pursued; studies of some important aspects of working of the economy with significant policy implications took time to be initiated. The complete withdrawal of Government from the market after the abolition of procurement, followed by the sharp increase in production of foodgrains in 1953-54 pushed prices down to very low levels. It was not then realised that there was an inevitable time-lag which would postpone any corrective effect that the developmental outlay might be expected to have on this trend. Similarly, in 1955-56 when prices started rising, the time-lags in the working of the inflationary forces and the cumulative nature of the growth of demand were not appreciated sufficiently or in time. The likely changes in the propensity to consume and the propensity to stock were also under-estimated; the available data in regard to these are, however, still inadequate and we ourselves have only been able to initiate some *ad hoc* studies to remedy the gaps in information in this sphere. In retrospect, the total dismantling of controls appears to have been a hasty step, particularly inasmuch as Government failed to take the opportunity to build up buffer stocks as prices fell.

4.36 As we have referred to earlier, as early as 1952, when decontrol of food was proposed by the Food Ministry, the Ministry had also recommended various precautionary and countervailing measures including the building up of buffer stocks and licensing of traders as an integral part of the decontrol proposals. The decontrol proposals and with them the recommendations for buffer stocks were not, however, accepted. Again in 1954 the Food Ministry had proposed that a minimum reserve stock of 15 lakh tons should be maintained by the Union Government and a skeleton of Food Administration should be continued in every State. These proposals were accepted. The Food Ministry further proposed that Government should make purchases in the open market at reasonable prices with a view to building up buffer stocks. This proposal was not, however, found acceptable. Besides, most of the State Governments had been unwilling to implement the Foodgrains (Licensing and Procurement) Order of 1952 and opposed its continuance when it was due to lapse early in 1955, and on the other

hand, some of the State Governments completely disbanded their food departments on the ground of economy. There was also a view that a stock of 15 lakh tons was too high as most of the previous enquiry committees had recommended lower figures. Yet when prices were rising in 1956, it was found that even a stock of 15 lakh tons was inadequate. In 1955 when prices had touched the rock bottom and many people thought self-sufficiency was round the corner and imports could be safely cut down, the Food Ministry pointed out, as has been mentioned in Chapter III, that inflationary effect on food prices of the developmental outlay proposed in the Second Plan would be severe and pressed *inter alia* for imports of 8 to 10 million tons of wheat for 5 years from the U.S.A. under P.L. 480 as a safety measure. In the following year a decision was taken by Government to import 3 million tons of wheat from the U.S.A.

4.37 A basic weakness was the absence of a well defined and co-ordinated policy of price stabilisation and of a machinery to implement it. Nor was there within the administration a unit charged with the specific responsibility of studying the variations of prices in their ramifications and considering by regions and sectors of the economy measures for their comparative stabilisation. The general complacency about the food situation made it difficult to realise that the bumper crop of 1953-54 came at the crest of a periodical cycle of production, and that output might not be sustained at that level. If the excess production could have been husbanded for lean years to come, the cultivators would have been assured that while under economic planning they should not expect very high prices, they would at the same time be insured against unduly low prices. An opportunity to fill the buffers with indigenous stock and thereby to ensure a measure of stability with growth under planning was, however, missed.

4.38 With the intention of getting fuller information from the Planning Commission about the reasons that had led to the rejection of the proposals of the Food Ministry, we sought an opportunity to meet the Deputy Chairman. We were, however, informed by him that it was not the practice of the Commission to give evidence before Committees and that any discussion informally held with him could not be quoted. Consequently we did not pursue the enquiry with him. We, however, met the Minister for Food and Agriculture who gave us information on his policy on the point.

4.39 We must, however, point out that the general atmosphere of complacency did not leave the Food Ministry also untouched. The operation of a regulatory measure like the Foodgrains (Licensing and Procurement) Order, 1952, was not insisted upon and the Order was not renewed after the necessary amendment to the Constitution was made in 1955. The storage construction programme of the

Food Ministry (and this is different from the construction programme of the Warehousing Corporation) was permitted to fall much behind the schedule. The location of godowns has to be decided on the assumptions about surpluses likely to arise and needs likely to be felt in favourable producing areas and in consuming as also deficit areas respectively. On the location programme there was considerable re-thinking from time to time as the food position altered. The necessary liaison between the Food Ministry and the Reserve Bank, particularly on credit facilities to the traders, developed slowly. Better understanding between the Food Ministry and the Port Authorities could have enabled proper phasing of imports of foodgrains and reduced loss of foreign exchange in demmurage.

4.40 Many witnesses have drawn our attention to the sale by auction and tender of nine lakh tons of rice by the Food Ministry at low prices alleging that this was done just when prices were falling thereby precipitating the slump. The Food Ministry informed us that as a part of the policy of decontrol the Union Government had agreed to take over stocks of rice with the State Governments. The Union Government's inspectors reported that much of this rice was deteriorating. On this report, the deteriorating rice was sold. Suffice it to say that the disposal of the old stocks was envisaged by the Union Government as an integral part of the decontrol and on a rough estimate the loss anticipated was put at Rs. 45 crores. This, we have been told, was considered not too heavy a price for decontrol. The fact, however, needs to be noted that much of the rice was sold by open auction. We have also found that through most of the period that rice was being sold, price of rice was rising and not falling as alleged. That the stock of rice needed to be sold cannot be gainsaid. The question was asked by certain sections of the trade why fresh purchases were not made to replenish the stocks. This is explained by the fact that the reserve stocks with Government were higher than 1·5 million tons of foodgrains and by the decision against engaging in buffer-stock operations. A somewhat inconsistent statement has been made by the witnesses who have criticised Government's disposal of rice by simultaneously charging the Government with initiating and accentuating rise in food prices with their open market purchases of relatively small quantities of rice for Kashmir and the Defence Forces. The contention that for these purchases prices higher than the then ruling market prices were paid is difficult to sustain because the rice purchased was of better quality and the price differential covered quality differences.

4.41 When the Government started counteraction against rise in prices of foodgrains, some of the measures were

inevitably slow because they were new and untried. The selective credit control, for instance, gained in effectiveness after a period of trial and error. Restrictions on movement of foodgrains were brought back belatedly. Big cities like Calcutta, Bombay and Delhi were cordoned off for wheat. The priority in rail-movements for foodgrains on trade account was downgraded. Later, various zones were constituted to restrict movements of foodgrains. The Essential Commodities Act had to be amended in June, 1957 to empower the Government to requisition hoarded stocks. Millers and big traders in certain areas were licensed. The armoury of Government was thus slowly re-filled. Orissa and Punjab were cordoned off for the purpose of direct procurement of rice. The pendulum thus swung back partly to controls to the extent of imposing restrictions on movements by trade. Many of the old lessons were painfully re-learnt, as for example, the need to check mal-practices in fair price shops through the use of family cards and institution of local supervisory committees.

4.42 Many of the short-comings of policy or execution were, in our view, due to the strong popular preference for total decontrol of foodgrains, a preference that was not unshared in the highest levels of the administration. There appears, however, to have been a misconception about the policy of Shri Kidwai. It was during his regime that the Ministry of Food and Agriculture issued the Foodgrains (Licensing and Procurement) Order in 1952 and prepared the scheme of buffer-stock operations in 1954. Shri Kidwai was obviously not thinking in terms of having complete decontrol and leaving a vacuum behind. He had an alternative method of regulation which may perhaps be described as "regulated decontrol". Shri Kidwai's policy was, we believe, a natural development of the policy of "strategic controls" that his predecessor, Shri K. M. Munshi, had enunciated on the eve of his retirement. And it was the same policy that Shri Kidwai's successor has sought to continue.*

4.43 The undue optimism about the food situation led to the slackening, or at least prevented the accelerating, of efforts for increased food production in many of the States. Intensity of efforts and sense of urgency of the situation, were generally lacking. The voice of the State Ministries of Food and Agriculture did not command the influence

*The relevant documents in this connection are :

1. Shri K. M. Munshi's letter dated March 14, 1952.

2. Food and Agriculture Ministry's note on "Price Stabilisation" forwarded with letter dated May 1, 1954 from the Ministry's Secretary.

3. Reply dated May 3, 1954 from Deputy Chairman, Planning Commission and earlier note from him on the subject.

Shri A. P. Jain's letter dated April 29, 1955.

and importance needed in many States. Insufficiency of knowledge regarding marketed surplus, which has not yet been remedied, added to the difficulties of evolving an effective food policy. In a developing economy it is not the production of food alone but marketed surplus that is of real importance.

4.44 It has to be recognised that in a developing economy a secular tendency to price rise will exist, though prices will fluctuate. It is a part of economic growth to achieve adjustments between production, incomes, employment, demand, costs, prices etc. at successive levels. It is sharp and abrupt rise or fall in prices which causes all kinds of disparities and therefore difficulties and hardships to different sections of the people, that has to be avoided.

4.45 In the above paragraphs we have offered some criticisms of Government's approach toward the problems of food and price policies as well as some aspects of food administration with a view to bringing some of the basic short-comings of past thinking and action into focus. It was only the unstinted co-operation and frankness of the official witnesses who appeared before us that have enabled us to put together our criticisms and make our assessment. These witnesses were as anxious as we were to distil from past experience significant conclusions for future action.

CHAPTER V

PROSPECTS FOR THE FUTURE

I

General

5.1 Our second term of reference requires us to assess the likely trends in demand and availability of foodgrains over the next few years, taking into account

(a) the steps taken and those proposed to be taken under the Second Five Year Plan by the Central and the State Governments to increase food production,

(b) the impact of growing development expenditure, increase in population and urbanisation, on the demand for marketable surpluses,

(c) availability of foodgrains from abroad in relation to requirements and in the light of the foreign exchange position.

It is extremely hazardous to attempt a forecast of economic trends, especially over a relatively long period with dynamic economic forces at work in the country and on the international economic plane. Yet some forecast is essential for the formulation of an adequate food policy. In the old days the pattern of consumption in the country was perhaps more or less stable while the variations in production and prices were the more unstable factors. But during the last few years not only production and prices but also population, income and consumption have started to change significantly from the age-old pattern and it seems likely that these changes will be further accelerated with progressive economic development of the country.

Difficulties of forecasting.

5.2 The problem of estimation of the future demand for foodgrains admits of no easy or single solution, owing to the difficulty of evaluating the relative importance and interactions of the various factors involved. The primary factor of importance in this connection is the growth in population. We have also to take into consideration other factors such as changes in income resulting from the development outlay on programmes under the Second Plan and the resulting changes in the propensity to consume and the propensity to stock foodgrains. The effect on the demand for different foodgrains of different income

groups will vary from region to region. An estimate of future demand can, however, be made with somewhat greater confidence *only* in broad or aggregative terms for the whole country and for the totality of foodgrains and not for different individual types and varieties of grains, and in particular regions.

Growth of population. 5.3 The two determinants of the growth of population are birth and death rates. These have in recent years been undergoing changes due to important developments affecting the demographic, sociological and economic factors. There has been in fact a downward trend, fairly steep in recent years, in the death rate due to improvements in medical aid, sanitation and public health programmes and increase in incomes. But the birth rate has not yet shown perceptible change. The net result is a more rapid increase in the rate of growth of population. This means that the increase in population during the quinquennium of the Second Plan is likely to be higher than in the preceding quinquennium. Apart from this, during and after the last war, the tempo of migration to urban areas from rural areas has increased rapidly. This is likely to be further accelerated with industrialisation and has an important bearing on the rate of growth of population as well as the demand for foodgrains, for the rate of growth and the demand for food vary considerably between the rural and urban areas.

5.4 A large part of the population is under-nourished on account of poverty and hence the elasticity of demand for food is fairly high, more so in less developed rural areas. Rough estimates of the elasticity of demand for various expenditure levels are available from the surveys of the National Sample Survey. It should, however, be noted that these results are based on a comparatively small sample of families spread over the different parts of the country and only the aggregate money values of the expenditure on the different kinds of foodgrains are available from such surveys. These estimates are liable to a large margin of error. Nevertheless, they might be useful for providing a broad picture of the dimensions of demand and expenditure. The factors mentioned above have been taken into consideration in making the estimates in the following section which are based on several assumptions regarding the various types of data used. In interpreting the results the various assumptions as well as the quality of the available statistical data have to be borne in mind.

II

Future Demand for Foodgrains

5.5 In regard to the likely trend of growth of population there are widely different assumptions. The Planning Commission has assumed that the population will

grow by 12.5 per cent. during the decade 1951-61. On the basis of the birth and death rates obtained by means of a sample census conducted by the Registrar General in 1952-54 all over India, the annual rate of natural increase of the population, which is the annual excess of births over deaths, turns out to be 1.5 per cent. It seems reasonable to suppose that the population did in fact increase at this rate during the quinquennium 1951-56. However, some experts are of the view that it may grow at a faster rate during the next quinquennium 1956-61 due to further decline in mortality. According to them the crude death rate during 1956-61 may be lower by about 5 per thousand than what it was during 1951-56. On this basis we may have to allow for a population increase at the rate of 2.0 per cent. per annum during the period of the Second Plan. (Coale and Hoover: Office of Population Research: Princeton University—Unpublished Study.) We have worked out projections on all the three assumptions. In the following paragraphs we have given by way of illustration the trends of demand based upon the highest assumption.

Additional demand due to population increase.

5.6 The level of demand for foodgrains is known to be very different in the rural and in the urban areas. On the basis of the data furnished by the National Sample Survey (Tenth Round—unpublished) it appears that the *per capita* consumer expenditure on foodgrains in urban areas is only 84.6 per cent. of that in the rural areas. If we allow for the somewhat higher prices of foodgrains in the urban areas than in the rural areas, it seems that, in terms of quantities, the *per capita* consumption of foodgrains in the urban areas may be only about 80 per cent. of that in the rural areas. Therefore, while assessing the effect of population growth on the demand for foodgrains, it is necessary to consider the growth in the rural and the urban populations separately.

Urbanisation.

5.7 Taking into account the process of urbanisation, namely, of migration of population from the rural to the urban areas, it seems that in recent years the urban population in India has increased at an annual rate more than twice as large as that shown by the total population. The annual rate of growth for the urban population is about 2·4 times that for the total population. If the total population increases at an annual rate of 2·0 per cent. during the quinquennium 1956-61 and if the rate of growth of the urban population maintains the same relationship to the rate of growth of the total population as mentioned above, then during the period 1956-61, the urban population may be expected to grow at an annual rate of 4·8 per cent. implying an annual rate of growth of 1·34 per cent. for the rural population. As a result of the increase in population that may take place during the Second Plan period,

we may expect the urban demand for foodgrains to increase by 26·3 per cent. and the rural demand by 6·8 per cent. which will mean about 10 per cent. increase in the total demand for foodgrains. This is the extent of increase in the demand for foodgrains that we may expect only as a result of the increase in population that may take place during the Second Plan period.

demand due to increase of income.

5.8 We may now take into account the fact that during this period a considerable rise in the *per capita* national income is expected. The relevance of the consideration of changes in the *per capita* national income lies in the fact that all available data relating to the consumer expenditure, both past and more recent, show considerable income elasticities of demand for foodgrains throughout the existing range of consumer incomes. This means that with higher income to spend, the consumers tend to spend a high proportion of the increased income on foodgrains.

5.9 The most recent data on consumer expenditure available to the Committee are those furnished by the National Sample Survey obtained during its tenth round of investigation covering the period from December, 1955 to May, 1956 (unpublished). The data classify the sample of households on the basis of their *per capita* total consumer expenditure and give for each class of households their average expenditure on cereals. The net indications of these data are that in the rural area, the *per capita* consumer expenditure on cereals goes up by about half a per cent. for every one per cent. increase in the *per capita* total consumer expenditure. The computation is based on the supposition that a given per cent. increase in *per capita* consumer expenditure is uniformly spread and implies the same per cent. rise in the consumer expenditure in all regions and at all existing expenditure levels. On the other hand, in respect of the improvement to be expected at different levels of consumer expenditure, it is probable that a given rise in the national income will be brought about by a proportionately smaller rise at the higher income levels thus bringing about a progressive reduction in existing inequalities. The income elasticities of demand for cereals in the urban areas appear to be much lower: a one per cent. increase in the total consumer expenditure is seen to be accompanied by less than one quarter per cent. increase in the expenditure on cereals.

5.10 The Planning Commission estimates an increase of 25 per cent. in the total national product during the Second Plan period. On the basis of the rate of population increase assumed by them (1·25 per cent.), this increase in the national product leads to an increase of 18 per cent. in the *per capita* income during the Second Plan period. On the basis of a higher rate of population increase (2 per cent.), the increase in the *per capita* income expected during the Second Plan period works out at 13 per cent. Hence, so long as the assumed increase in national product

remains the same (25 per cent.), a lower rate of increase in population will be associated with a higher rate of increase in *per capita* income while a higher rate of increase in population will be associated with a lower rate of increase in *per capita* income, so that their combined effect on the aggregate demand may not be substantially different. The figure of 13 per cent., of course, is the increase in the average *per capita* income for the whole population. As mentioned earlier, because the income elasticities of demand for foodgrains are very different in the rural and the urban areas, we propose to consider the effect of increase in *per capita* income in the two areas separately. A break-up of the total national product into rural and urban sectors is not available. However, the Second Plan gives a break-up by main industrial sectors. In order to obtain a break up of the total product into the rural and urban sectors, we propose to treat the entire product in the sectors (i) agriculture and allied pursuits and (ii) small enterprises plus one-fourth of the product in the sectors (a) commerce, transport and communications and (b) professions and services as belonging to the rural sector.

5.11 On this basis and on the basis of the population increase that we have assumed for the Second Plan period, the expected increase in the *per capita* income of the whole population works out to about 13 per cent. When considered for the rural and urban populations separately, the increase in the *per capita* income works out to 12·5 per cent. for the rural population and 5·2 per cent. for the urban population.**

5.12 The whole of income does not, however, go into consumer expenditure; a part of it goes into savings and investment. With increased incomes, the proportion going into savings and investment is expected to increase somewhat. The data on this point are very inadequate. The Second Plan assumes that during the Plan period, though the total national income will increase by 25 per cent., the total consumer expenditure will increase by only 21 per cent. On this basis, the *per capita* consumer expenditure in the rural and urban areas may be expected to increase further by 10 per cent. and 4 per cent. respectively. Further, making some allowance for reduction in inequalities in the distribution of consumer expenditure a 10 per cent. increase in the *per capita* consumer expenditure in the rural sector may lead to a 5·5 per cent. increase in the

**This might appear puzzling at first sight. Hence a word of explanation is probably necessary. The apparent discrepancy is explained by the fact that the *per capita* income in the urban areas is very much higher than that in the rural areas and that the proportion of the population in the urban areas is expected to increase progressively. Hence a fuller statement of the situation would be as follows : the *per capital* income of the rural population in 1961 is expected to be about 12·5 per cent. higher than the *per capita* income of the rural population in 1956 and the *per capita* income of the urban population in 1961 is expected to be about 5·2 per cent. higher than the *per capita* income of the urban population in 1956.

consumer expenditure on cereals and a 4 per cent. increase in the *per capita* expenditure in the urban sector to a 1·2 per cent. increase in the urban sector.

5.13 We may now combine these sets of increases to be expected in the consumer expenditure on cereals in the rural and the urban areas. Considering that the ratio of the urban to the total population at the end of the Second Plan period is estimated to be approximately 22 per cent. and taking into account that the *per capita* consumer expenditure on cereals in urban areas is about 84·6 per cent. of that in the rural areas, it appears that the ratio of the urban consumer expenditure on cereals to the total consumer expenditure on cereals is about 19·3 per cent. at the end of the Second Plan period. During the Second Plan period we estimate an increase of 1·2 per cent. in the *per capita* expenditure on cereals in the urban areas and an increase of 5·5 per cent. in the *per capita* expenditure on cereals in the rural areas on account of an increase in the *per capita* total consumer expenditure. When these are combined, they give an estimated increase of 4·7 per cent. in the *per capita* total consumer expenditure on cereals during the Second Plan period on account of an estimated increase in the *per capita* total consumer expenditure.

5.14 As mentioned earlier, the National Sample Survey data furnished to us related to the expenditure on cereals only. It is for that reason that in the above discussion we have referred to the consumer expenditure on cereals only. However, in the absence of relevant data, it seems reasonable to assume that similar increase in the expenditure on pulses may be expected. We shall, therefore, assume that the estimated increase of 4·7 per cent. refers to the *per capita* expenditure not only on cereals but on all foodgrains.

Total increase in demand.

5.15 In order to obtain our final estimates of increases in the consumer demand for foodgrains that may occur during the Second Plan period, we should now combine the two sets of estimated increases, one on account of an increase in the total population and the other on account of an increase in the *per capita* total consumer expenditure. It may be explained that changes in the *per capita* total consumer expenditure are usually accompanied by qualitative changes in the pattern of consumer expenditure. For instance, though at very low income levels, an increase in the consumer expenditure on foodgrains may be largely due to an increase in the quantities of foodgrains consumed without much change in regard to their composition, at higher income levels, an increase in the consumer expenditure on foodgrains may be largely due to a shift from inferior to superior qualities of the same grain or from inferior to superior grains such as from

millets to rice or wheat. Hence a certain increase in the *per capita* consumer expenditure on foodgrains caused by an increase in the *per capita* total consumer expenditure may not involve the same increase in the quantities of foodgrains consumed. In the absence of the relevant data we have no basis to judge to what extent the estimated increases in the *per capita* consumer expenditure on foodgrains due to increases in the *per capita* total consumer expenditure may be on account of a possible shift from inferior to superior grains. In order to indicate the magnitude of a possible shift of this nature, we shall proceed on the assumption that rice, wheat and pulses are superior grains while all other cereals are inferior grains. On this basis, the inferior grains form about 30 per cent. of the existing supplies of all foodgrains. We shall further assume that the average price of the superior grains is about 50 per cent. higher than the average price of the inferior grains. On this assumption, a 4·7 per cent. increase in the consumer expenditure on foodgrains may cause an increase between 5 and 6 per cent. in the *per capita* consumption of superior grains and anything up to 4 per cent. in that of inferior grains. The increase in the *per capita* consumption of all foodgrains will be between 4 and 4·5 per cent.

5.16 We may now combine these increases in *per capita* consumption of foodgrains with the increases in the demand for foodgrains on account of an increase in the total population. During the Second Plan period, we expect the consumer demand for foodgrains to increase by about 10 per cent. on account of an estimated increase in the total population. This when combined with an increase from 4·0 to 4·5 per cent. in the *per capita* consumption of foodgrains on account of an expected increase in the *per capita* total consumer expenditure gives us an expected increase between 14·4 and 15·0 per cent. in the consumer demand for foodgrains during the Second Plan period.

5.17 We have so far considered the consumer demand for foodgrains. In addition to the demand for human consumption, foodgrains are required for cattle feed and for seed. A certain amount of wastage out of the total production has also to be allowed. Little information is available about these requirements and it is customary to take them to be about 12·5 per cent. of the total gross production. While requirement for seed and wastage may not increase proportionately, the requirement for cattle feed may increase to a larger extent. In the absence of precise information, however, if these requirements are supposed to bear the same relationship to the future production, we may say that our estimates of expected increase in the consumer demand for foodgrains may be extended to the total demand for foodgrains. As such, we may expect that during the Second Plan period, the total demand for foodgrains may increase by 14·4 to 15·0 per cent.

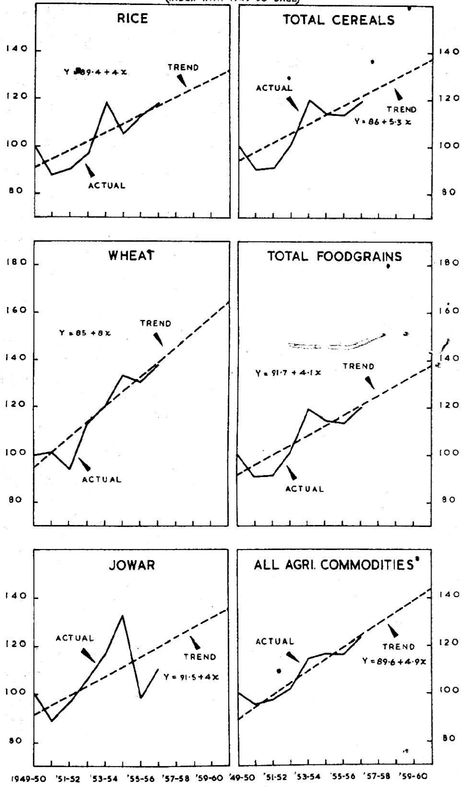
5.18 In order to work out in quantitative terms the future demand for foodgrains, it is necessary to have estimates of total demand in the base period. But we have no information regarding changes in the stocks with farmers and traders and hence it is difficult to frame any reliable estimates. As we have seen in the previous chapter, the gross availability of foodgrains in 1955-56 was a little over 67 million tons. On this basis the total demand for 1960-61 may be roughly estimated to be 77 million tons excluding demand for variations in stocks. If it is felt that in the absence of data on stocks with farmers and traders it will not be proper to take the figure for only one year and that it will be more realistic to take the average for three years, then the average gross availability during the base period will work out to a little over 69 million tons and the estimate of demand in 1960-61 will approximate 79 million tons.

5.19 Both these estimates of 77 and 79 million tons are based on certain assumptions regarding growth of population, distribution of income and elasticity of demand. But if one adopted different sets of assumptions for the purpose of projection, one would get somewhat different estimates of demand. For instance, we have assumed above that the population will increase at a higher rate, namely, 2 per cent. per annum in future. But we could also assume that it will continue to increase at the rate of 1·5 per cent. computed by the Registrar General. We have assumed that the distribution of income will be according to a particular pattern but the future pattern of distribution could be also assumed to be somewhat different. Similarly, we have got different sets of figures regarding income elasticity of demand for different trends of prices. We do not propose to go into these details in this report. We should like, however, to mention that most of these estimates of demand range between 75 and 80 million tons. We may also note that if money incomes and prices tend to go up sharply during this period, the propensity to consume and propensity to stock will also tend to go up. In that event the demand for foodgrains may conceivably exceed even the upper limit of 80 million tons mentioned above. For our present purpose, however, we shall assume as a working basis that the demand for foodgrains in 1960-61 will be of the order of 79 million tons (which is also obtained even on the basis of 1·5 per cent. rate of population growth with certain alternative assumptions regarding income, etc.) if prices continue at the present levels. If there is any deflationary trend, demand may be somewhat lower. While if there is any inflationary trend it may be somewhat higher. The break-down of 79 million tons between rural and urban areas works out roughly to 66 and 13 million tons respectively and between superior grains, namely, rice, wheat and pulses and inferior grains, namely, millets, works out to 56 and 23 million tons respectively.

CHART VII

PRODUCTION TRENDS

(INDEX WITH 1949-50 BASE)



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III

Future Supply of Foodgrains

5.20 Supply of foodgrains has two aspects, one of overall supply and the other of supply in the market. Supply at both these levels is affected by the same set of factors, namely, production, imports and exports and changes in stocks or inventories. The first two of these factors are the most important not only in the short run but also in the long run. The third factor may be relatively not so important for an analysis extending over a number of years although its importance over seasons within a year is undoubtedly great. Analysis of the prospect of supply of foodgrains over the next few years will, therefore, be attempted in terms of supply both at the overall level as well as at the market level and in relation mainly to the expected behaviour of production and imports and exports.

Second Plan Target.

5.21 As we have explained in chapter III the Second Plan originally provided for an increase in the production of foodgrains of the order of 15 per cent. or 10 million tons (as against 7·6 million tons under the First Plan) over the estimated production of 65 million tons in 1955-56. This figure was distributed among the various foodgrains as follows:

Rice	3—4 million tons.
Wheat	2—3 million tons.
Other Cereals	2—3 million tons.
Pulses	1·5—2 million tons.

Subsequently, these targets were reviewed by the Planning Commission in consultation with the States and were by agreement increased from 10 to 15·5 million tons (23·8 per cent.) of additional foodgrains. The scheme-wise break-down of the revised target of additional production is given below:

Scheme-wise target of additional production of foodgrains in Second Plan

Scheme	Additional production	
	Million tons	Per cent.
Major irrigation	3·02	19·5
Minor irrigation	1·89	12·2
Fertilizers and Manures	3·77	24·3
Improved seeds	3·42	22·0
Land Reclamation and Development	0·94	6·1
Improved agricultural practices	2·47	15·9
Total	15·51	100·0

The grain-wise break-down of the target of additional production shows that rice is to account for an additional 6·5

million tons, wheat 3·0 million tons, other cereals 3·5 million tons and gram and pulses 2·5 million tons.

Achievement possibilities of the Plan Targets.

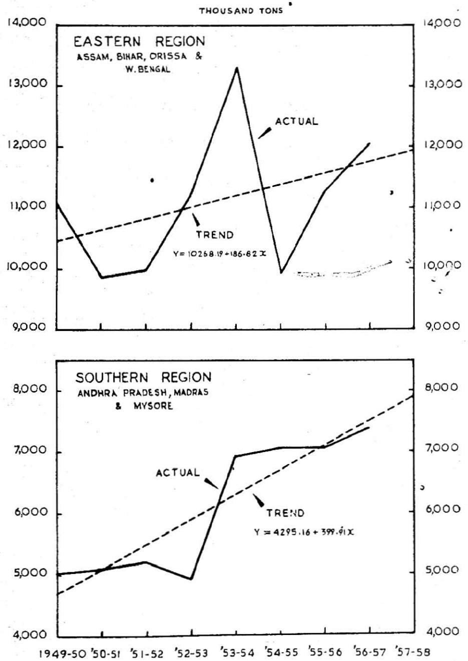
5.22 We have tried to ascertain the views of the Union and the State Governments as well as of other interested organisations like those of traders, growers and political parties regarding the possibility of achievement of this target. Most of the State Governments told us that not more than 60 per cent. of the revised targets under the Second Plan will actually be achieved. We, therefore, feel that the revised targets of additional foodgrains production are no longer realistic, and future supply has to be estimated in terms of an achievement in the neighbourhood of 60 per cent. of the targets laid down. This means that as against a target of additional production-potential of 15·5 million tons of foodgrains by 1961, the actual achievement is likely to be of the order of 10 million tons. On this basis, the level of output of foodgrains in 1960-61 is expected to be in the neighbourhood of 75 million tons.

Projections of the past trend.

5.23 While these estimates have the backing of the considered judgement of experienced politicians, administrators and others they have also to be assessed in the light of whatever statistical evidence is available regarding the past behaviour of production. The estimates given in the following paragraphs have been arrived at on the basis of trend analysis of the past data relating to the best estimates available of total production to the yield per acre of the different foodgrains. The analysis has been confined to data for the years 1949-50 to 1956-57. The data for the earlier years are not all comparable. No special sanctity can obviously be claimed for a trend analysis based on as few as eight observations. The only justification that can be given is that no better alternative is at present available for any analysis of this sort. An examination of the scatter of these observations showed that straight line offered the best fit to the figures of both adjusted production as well as yield per acre. The question of fitting a non-linear trend was considered but abandoned for three reasons. First, the scatter of the points did not give any positive indication of a non-linear growth during the last eight years. Secondly, a linear growth of agricultural production in the early years of development from a low level has been experienced by most countries. Theoretically, therefore, there is justification for accepting a linear trend in the growth of production in India at this stage. Thirdly, there is the purely statistical argument against attempting to fit a non-linear trend to observations that are as few as only eight. Obviously, the degrees of freedom that would be lost in trying to fit a non-linear trend are much larger than would be the case under a linear trend and would to that extent affect the significance of the estimates adversely. Projections for 1960-61 have, therefore, been obtained on the basis of straight line

CHART VIII

ADJUSTED PRODUCTION OF RICE



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trends fitted to the data for the last eight years according to the least squares method.

Estimates based on adjusted production.

5.24 The Ministry of Food & Agriculture have issued an index of adjusted production of the various foodgrains dating back to the year 1949-50 (See Appendix IV). Absolute figures of production have been computed with the help of this index series and are, therefore, much more comparable than the unadjusted figures and represent the best series that can be prepared under the present circumstances. The trend and the projections have been calculated in respect of rice, wheat and other cereals and for different States and regions on the basis of these adjusted figures. It appears from these projections that the additional production expected on the basis of past trends is of the order of 4·5 million tons in the case of rice, 2·1 million tons in the case of wheat and 2·9 million tons in the case of other cereals, or a total of 9·5 million tons of cereals. Adding a figure of 1·9 million tons for pulses, the production of which has shown a steady rise, the total estimated production in 1960-61 of foodgrains works out to be of the order of 11·4 million tons. This estimate is approximately 74 per cent. of the revised target of additional production under the Second Plan. It seems, therefore, that if the behaviour of production in the last few years is to be taken as a guide, 74 per cent. of the revised target is expected to be achieved. This estimate of the overall production needs, however, further examination in respect of its acreage and yield components.

Fluctuation in acreage.

5.25 In order to assess the estimates of production increase arrived at on the basis of the past trend, the nature as well as the causes of increase that have taken place in the past have to be examined. This means that it is necessary to consider the past and the future changes in acreage as well as changes in the yield per acre of the different foodgrains separately. A study of the figures of the acreage under rice, wheat, millets and total cereals for the years 1949-50 to 1956-57 along with indices of production for these years shows that while acreage under cereals has increased by 10·3 per cent. between 1949-50 and 1956-57, a small proportion of which is undoubtedly due to increase in double-cropping, production has gone up by 19·4 per cent. thus showing that yield per acre has also increased though not proportionately. In the case of rice the growth in production seems to have taken place mainly through increase in the yield per acre while in the case of wheat the increase in production seems to have been achieved mainly through increase in acreage. The interesting fact to be noted is that in 1953-54 there was a very large increase in acreage under millets and that in subsequent years acreage has been decreasing. Projections into the future on the basis of past trend in the case of wheat and millets are somewhat risky mainly because the

increase in acreage under each that has taken place since 1949-50 may not continue in future in the absence of substitution of millets by wheat. It seems, therefore, that the rate of growth of wheat and millets production taken together will in future be perhaps lower than has been the case in the past. The same is not, however, true for rice, because the growth of production in the past has been brought about very largely through increases in the yield and expansion of acreage through double cropping on irrigated lands.

Projected yield per acre in 1960-61.

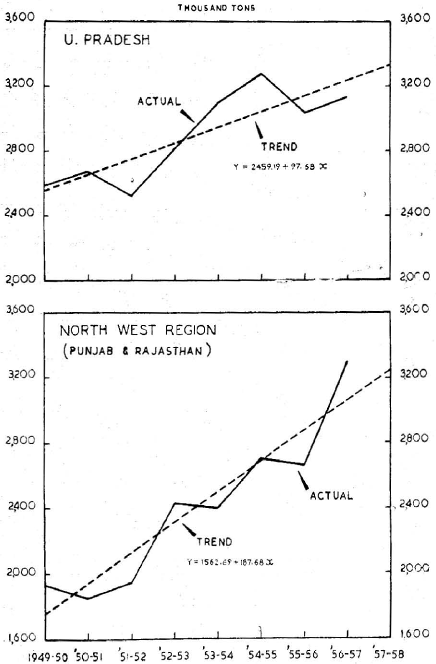
5.26 Figures of yield per acre of the different foodgrains are more comparable over the last eight years than those of the acreage or of unadjusted production. An attempt has, therefore, been made to fit a trend line to the figures of yield per acre and therefrom obtain projections for the year 1960-61. Calculated on the basis of the past trend, the expected increase between 1955-56 and 1960-61 in the yield per acre in India, as a whole, works out to 16·3 per cent. for rice, 7·9 per cent. for wheat, and 10·8 per cent. for other cereals. Three significant conclusions emerge. First, intensification of cultivation has been proceeding and is likely to proceed at a much higher pace (about double) in the case of rice than in the case of either wheat or other cereals. Secondly, if the present trend is to continue, the phenomenal increase in wheat output observed during the last eight years is likely to slow down considerably unless a drive for more intensive cultivation of wheat is launched. Thirdly, the case of other cereals is somewhat anomalous, though, as a whole, the picture here is a little better than in the case of wheat. In spite of decrease in acreage since 1953-54, increase in yield per acre is keeping up production proportionately higher.

Production estimates based on projected yield per acre.

5.27 Independent estimates of the likely production level in 1960-61 can now be made with the help of the projected yield per acre and on the assumption that acreage under the different foodgrains will reach at least the highest figure attained during the last two years, 1955-56 and 1956-57. Some adjustments in the projected yield figures are, however, necessary in order to make these estimates realistic. The major adjustment seems to be called for in respect of the projected yield for Rajasthan, U.P. and the Eastern Region. Figures for Rajasthan show a very large increase in yield per acre of rice and wheat so much so that the level of yield in 1960-61 for these crops among the States becomes highest in Rajasthan. This obviously cannot be so. The yield level of rice and wheat for Rajasthan in 1960-61 has, therefore, been suitably scaled down. Secondly, in the case of the Eastern Region, the yield level of wheat shows a decrease mainly because of the poor crop in the last two years. This can also be ruled out as unlikely. A more realistic assumption will be not to expect any increase in the yield level. Thirdly, for the purpose of our calculation it is assumed that there is no increase or

CHART IX

ADJUSTED PRODUCTION OF WHEAT



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decrease in the yield of rice in U.P. With these adjustments, the following estimates of production increase in 1960-61 are arrived at :—

Estimated increase of production of foodgrains in 1960-61 on the basis of yield per acre trend.

(Million tons)

State and Region	Estimated increase of production in 1960-61 over 1955-56			
	Rice	Wheat	Other cereals	Total Cereals.
Rajasthan	0·012	0·152	0·428	0·592
Punjab	0·032	0·098	0·216	0·346
Bombay	0·285	0·010	0·710	1·005
U. P.	0·000	0·018	0·208	0·190
Madhya Pradesh	0·676	0·301	0·423	1·400
Southern Region*	1·949	0·008	0·664	2·621
Eastern Region	1·253	0·000	0·007	1·260
All India†	5·102	0·538	2·237	7·877

*Excluding Kerala.

†All-India figures are not the total of the State and regional figures shown here, because these States and regions do not cover the whole of India.

5.28 The broad statistical analysis attempted here offers two independent estimates of the production increase that is likely to take place in respect of foodgrains during the Second Plan period. These estimates are put together in the figures given below :— **Alternative estimates of production in 1960-61.**

Estimated increase of production of foodgrains in 1960-61 on different bases.

(Million tons)

Foodgrains	Estimated increase in 1960-61 over 1955-56 according to		
	Adjusted production trend	Yield per acre trend	Average of the two
Rice	4·5	5·10	4·80
Wheat	2·1	0·5	1·30
Other cereals	2·9	2·2	2·55
Pulses and gram	1·9	1·4	1·65
TOTAL	11·4	9·2	10·30

We have, therefore, two estimates, one on the low side given by the yield trend and the other on the high side

given by the trend of adjusted production. Increase in foodgrains production during the Second Plan is likely to be between these two limits. For practical purposes the average of these two estimates, namely, 10·3 million tons may be taken as a guide. This figure will allow for any further increase in acreage that may take place by 1960-61. If these increases are added to the figures of domestic production in 1955-56 we get estimates of the domestic supply of foodgrains in 1960-61 to be 75·6 million tons. This figure is comparable with the estimate of 77 million tons for demand mentioned in paragraph 5.18. But here also, there are alternative sets of estimates possible. For instance, one may be on the basis of the calculated trend figure for 1955-56, and the other on the basis of the average of the adjusted production figures for the three years, 1954-55 to 1956-57, as shown below:

Estimated production of foodgrains in 1960-61

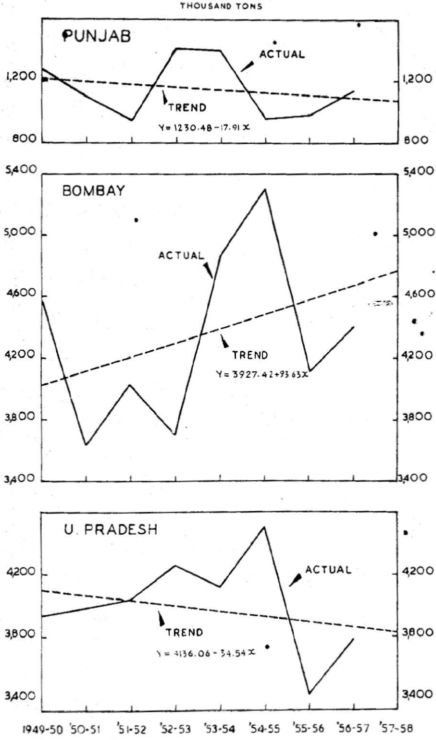
(Million tons)

Foodgrains	Estimated production in 1960-61 on the basis of		
	Actual (adjusted) production in 1955-56	Trend figures of production in 1955-56	Average production (adjusted) for 1954-55 to 1956-57
	I	II	III
Rice	31·66	31·77	31·51
Wheat	9·87	9·99	10·11
Other cereals	21·60	23·15	22·98
Pulses and gram	12·47	12·61	12·73
TOTAL	75·60	77·52	77·33

Of these alternative sets of estimates, however, the one based on the calculated trend figure for 1955-56 (II) seems to have the largest measure of statistical validity. Among the other two, the one based on the average production during the last three years (III) is more justifiable than the one calculated from the figures of actual production in 1955-56 (I). We, therefore, accept the estimate (II) based on the trend figure for 1955-56 as showing the most likely level of domestic availability of foodgrains in India in 1960-61. This estimate, it will be noted, agrees very closely with that based on the average production level in the last three years (III). The expected domestic production of foodgrains in 1960-61 is, therefore, most likely to be of the order of 77·5 million tons. This figure of likely production is comparable

CHART X

ADJUSTED PRODUCTION OF OTHER CEREALS



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to the figure of 79 million tons for likely demand in 1960-61 accepted by us in paragraph 5.18. The likely production of superior grains in 1960-61 may be about 54·4 million tons against an estimated demand of 56 million tons mentioned in paragraph 5.19. The expected increase in foodgrains production during the Second Plan period will be of the order of 10·3 million tons, which represent roughly two-thirds of the Plan target.

Qualifications to the estimates : some aspects of the growth pattern of foodgrains production.

5.29 In presenting these estimates, we would like to emphasize a number of important qualifications. First, the estimates are not to be taken as absolute and free from errors. These are obviously subject to the same defects as the primary data from which they have been derived. The estimates merely reflect the expected level of production in 1960-61. Secondly, the actual production in 1960-61 or, for that matter, in any year may vary considerably from the expected figure. In the past, the range of variation of foodgrains output has been of the order of 7 per cent. on each side of the trend in abnormal years mainly because of the natural factors. In any attempt to plan food policy, therefore, account has to be taken of the likelihood of actual production being substantially higher or lower than the expected level. Thirdly, the fluctuations in production have in the past followed a cyclical pattern of average length between six and seven years. In planning the future food policy, therefore, account has to be taken of the likelihood of production falling below the trend in about two years of a cycle and rising above it about that often. Fourthly, in presenting figures of the expected increase in production by 1960-61, we do not hold that this increase will come about through smooth and continuous rates of growth year to year. Major increases in agricultural production in every country have come about when viewed from a short-term angle, through discrete jumps followed by slow growth. The long-term trend, however, smoothes out these kinks and steps. The experience of India so far has been more or less similar. Production has reached a new higher level since 1952-53 and is expected to reach another higher level as the Second Plan progresses. In fact, it is for this reason that estimates have not been given here for the individual years, 1957-58 to 1959-60. Lastly, any estimates of future production for individual crops and for individual States are bound to be subject to a much wider margin of error than for total production. In fact, we have given figures of projected production of individual crops and for individual States only for the purpose of arriving at an estimate of the total production.

Inter-crop variations in growth of output.

5.30 Available figures show that the future outlook for the different foodgrains is not the same. In the last few years, wheat production has increased much more than that of other foodgrains. This seems to have given rise to a

complacency in regard to wheat, which is unwarranted by the basic factors. It is true that there is perhaps a large scope still left for increase in wheat acreage in Punjab and Rajasthan, as the Bhakra-Nangal waters become available in larger quantities and in distant areas. But so far as the overall position is concerned, the scope is much less than at the beginning of the First Plan. If wheat output is, therefore, to be kept up, attention has to be given more to yield increases through intensification of cultivation on a larger scale than has been possible in the past. In the case of other cereals the need for intensified cultivation is even more urgent, because acreage seems to have passed the upper limit of increase. In fact, the major problem of supply in future is likely to arise in the case of millets unless acreage decreases are more than balanced by yield increases. So far as rice is concerned, the possibility of area extension (as distinct from acreage increase through double cropping) is limited, while yield increases have been taking place though not uniformly all over the country. This trend needs to be strengthened considerably in the near future. There is, however, some scope still left for acreage increases through double cropping in some of the irrigated areas.

Inter-regional variations in growth of output.

5.31 These figures bring out another point of significance for the country, *viz.*, variations both in the actual and in the expected rates of growth of foodgrains output among the different States of India. It is obvious that the rate of growth of foodgrains production is far from uniform all over the country. In the case of rice, the actual and the expected rates of growth are the highest for the Southern Region (excluding Kerala), high for Rajasthan, Madhya Pradesh and Punjab and the lowest for U.P. and the Eastern Region. And in the Eastern Region, the growth is much higher in West Bengal and Assam than in Bihar and Orissa. In the case of wheat, Rajasthan and Madhya Pradesh show unusually high rate of growth, whereas the Eastern Region shows decreases in both production and yield. Other cereals show even greater variations. Rajasthan shows the highest rate of growth here again, while U.P. and the Eastern Region show decrease in output as well as yield per acre.

Rajasthan.

5.32 Because of the incomplete and unreliable figures of Rajasthan for earlier years due largely to the fact that there was no reporting from extensive areas, it has been necessary to make adjustments in the figures of that State. If the figures of Rajasthan are taken without such adjustments, they would show very high rates of growth largely reflecting the fact that there has been a growth of the reporting area.

Uttar Pradesh.

5.33 The case of Uttar Pradesh needs special mention not because of the unreliability of its statistics, but because of the unhappy trend it shows. One of the largest producers of rice, wheat and other cereals, this State has shown a

declining tendency in respect of yield of all these crops in the last few years. Its performance in respect of foodgrains, however, can be improved considerably in the near future. We would like to emphasize the urgent need for more intensive agricultural development programmes in this State which incidentally is the largest producer of foodgrains in India.

Eastern Region. 5.34 Assam, Bihar, Orissa and West Bengal have been grouped together in our analysis. The performances of these States are not, however, uniform by any means. While the statistics of West Bengal are good, those of the other three States, *viz.*, Bihar, Assam and Orissa, leave much scope for improvement. When the actual performance of these States is compared, it is found that West Bengal shows the most consistent and steady progress in the growth of output. Bihar has been a problem State for a long time. It seems to have had more than its due share of crises and reverses. In fact, instability of production is the greatest in this State. Orissa's and Assam's performances also leave much scope for improvement.

Southern Region. 5.35 The Southern Region excluding Kerala has shown the largest growth in rice output in the past and has now the highest yield level for rice among the States in India. The main problem in this region is to maintain the past rate of growth. Among the component States of the Southern Region, Kerala shows a poorer record than the others. Kerala should put more emphasis on foodgrains production than it has in the past. The rice production in the surplus State of Andhra Pradesh needs to be helped and watched.

Bombay, Madhya Pradesh and Punjab 5.36 Bombay, Madhya Pradesh and Punjab are the States where large increases in acreage have taken place during the last eight years. There is scope still left perhaps for acreage increases provided irrigation is further extended in these States. Yield levels in Bombay and Madhya Pradesh are, however, lower than in Punjab, and here also irrigation may help. In the two largest States of India, therefore, the scope for stepping up the growth of foodgrains output is still large.

Food *versus* cash crops. 5.37 In estimating the future production of foodgrains, no attempt has been made either to allow for any shifts in acreage between cash and food crops or to assume any change in the present plans for cash crops. There is some force in the arguments of the school that advocates shifting of foodgrains acreage to high value and foreign exchange yielding commercial crops. But at this crucial stage in India's development, it is not the counsel of wisdom to denigrate foodgrains production. Besides, for any country to make its food economy dependent heavily on the fluctuations of the world trade in other agricultural commodities is a policy fraught with grave dangers. It would, therefore, be wise to continue the present policy of emphasizing increase in production of both foodgrains and cash crops.

IV

Availability of Foodgrains from Abroad

Indian Union's rising trend of imports. 5.38 Even before World War II, Indian Union was a net importer of foodgrains. The trend of imports was upward till 1952, when relaxation of physical controls started. As decontrol progressed, and internal production improved, imports went down. In the latter half of 1955, food prices started rising and Government undertook distribution of foodgrains to meet the situation. Imports had, therefore, to be stepped up in 1956 and 1957. In 1956, they amounted to 14·2 lakh tons and in 1957 they are expected to be of the order of 37·2 lakh tons.

5.39 During the pre-War period, imports of rice constituted the bulk of the total imports of cereals into Indian Union. Burma was the main supplier of rice. With the fall of Burma during World War II, rice imports dwindled to roughly 20 per cent. of the total cereal imports and wheat became the major import item. Even after the end of the War, rice imports did not regain their lost importance and wheat has continued to form the bulk of the total cereal imports. The world availability of foodgrains has, therefore, been such that we have come to depend more on wheat than on rice, and this position seems to have come to stay, more or less. Incidentally, this is crucial from the point of view of future food policy.

5.40 Wheat is imported into India mainly from U.S.A., Australia and Canada. Of these countries, Canada has ceased to be a supplier since 1954. In 4 years out of the decade ending 1957, wheat imports from U.S.A. were greater than those from Australia. The first three years were 1951, 1952 and 1953 when 2 million tons of American Loan wheat flowed into India; the fourth year is 1957 when major portion of wheat contracted for with U.S.A. under P.L. 480 is expected to be received. In the remaining six years of the decade, Australia has been the major supplier of wheat to India.

5.41 As already mentioned, the main source of rice supply to India has been Burma. Some quantities have also been obtained from Thailand, China, Viet-Nam and U.S.A. Thailand has ceased to be a supplier of rice to India since 1953; prior to that, between 1948 and 1952, it supplied India with quantities varying between 1 lakh and 2 lakh tons. Imports obtained from China and Viet-Nam in recent years have been relatively small. In 1957, about 1·9 lakh tons of rice have been obtained from U.S.A. under P.L. 480 against which the imports from Burma amount to 5·1 lakh tons. Burma, therefore, continues to be the largest single supplier of rice to India.

Import requirements for next few years. 5.42 Thus, the present position is that U.S.A. and Australia are the main suppliers of wheat to India and Burma and U.S.A. are the main sources of rice supply. While the share

India can possibly have in the exportable surplus of these and other countries in any year would seem to govern her imports, India's requirements from abroad, both for consumption and stocks, would, in our view, vary between 20 to 30 lakh tons for some years to come. In 1957, with an opening stock of 2·9 lakh tons and imports of 37·2 lakh tons, Government issues are expected to amount to nearly 31 lakh tons, leaving a closing stock of about 10 lakh tons. This is short of the target of 20 lakh tons which the Government already have before them for building up buffer stocks. Besides, in view of the current reports of damage caused to the 1957-58 food crops which do not leave one optimistic about internal procurement, larger quantities than in 1957 may be needed for distribution. On present estimate, therefore, the import requirements for 1958 would appear to exceed 30 lakh tons. Once, however, a comfortable 'buffer stock' has been built up, the import requirements might be stabilised at a somewhat lower level. The need for imports would still remain. What is, therefore, needed is to ensure adequate supplies from the major exporting countries on a long-term basis.

Prospects of wheat imports.

5.43 For imports of wheat, three points need to be considered. The first is the import quota guaranteed to India under the third International Wheat Agreement; the second is the existing three-year agreement with U.S.A. under P.L. 480; and the last is India's obligation to purchase from commercial sources.

5.44 In 1949, India became a party to the first International Wheat Agreement (I.W.A.). The agreement has been renewed twice since—first in August, 1954 and thereafter in August, 1956. The annual import quota of India was 15 lakh tons in the first agreement and 10 lakh tons in the second. In the third agreement, which came into force from 1st July, 1956 for a three-year period, her import quota stands at 2 lakh tons annually India imported her full quota in the first year of the agreement. In the second year, *viz.*, 1957-58, she has so far imported 1·5 lakh tons but it is expected that the remainder of the quota would be imported before the end of the year. In the third year, *viz.*, 1958-59, another 2 lakh tons would be available to India. The possibility of import under I.W.A. for the year 1958 may thus be put at 2 lakh tons.

5.45 In August, 1956 India entered into a three-year agreement with U.S.A. under P.L. 480 for the import, *inter alia*, of wheat worth $200 million and rice worth $26·4 million. It is estimated that these amounts would enable the import of 31 lakh tons of wheat, and 1·9 lakh tons of rice. Of the 31 lakh tons of wheat, 26·5 lakh tons would have been received by the end of 1957. The balance of 4·5 lakh tons is expected to be imported in 1958. The entire quantity in the three-year agreement would thus be telescoped into two years.

5.46 One condition laid down in the agreement under P.L. 480 with U.S.A. is that India would import 5·5 lakh tons of wheat annually from commercial sources during each of the three fiscal years of the agreement and that, of this quantity, 1·5 lakh tons would be from U.S.A. Assuming that out of this 5.5 lakh tons, 2.0 lakh tons would be covered by the I.W.A., India can hope to obtain 3.5 lakh tons from other sources in 1958.

5.47 Thus, the total imports of wheat on present estimate would amount to 2 lakh tons under I.W.A., 4·5 lakh tons under P.L. 480 and 3·5 lakh tons from commercial sources, a total of 10 lakh tons. If a second agreement is concluded with U.S.A. under P.L. 480, it may be possible to obtain substantial additional quantities and this would help considerably in meeting the inflationary pressure.

Prospects of rice imports.

5.48 In May, 1956 India entered into an agreement with Burma for the import of 20 lakh tons of rice over a period of five years beginning from June, 1956. Actual imports under this agreement amounted to 2.7 lakh tons in 1956 and 5 lakh tons in 1957. The agreement provides for an import of 5 lakh tons in 1958 and 3.5 lakh tons in each of the subsequent two years. Small quantities of rice can also be obtained from U.S.A., Egypt, Thailand, China and Viet-Nam.

CHAPTER VI

PRICE STABILISATION

Need for price stabilisation.

6.1 It should be clear from what has been said in the previous chapter that the food problem is likely to remain with us for a long time to come. As we step up the programmes for economic development, the income of the people and hence the demand for food will increase. Though increase in production may roughly keep pace with increase in demand, a gap between demand and output is likely to subsist. The instability of food prices is also not likely to abate during the next few years. The strains and stresses of a growing economy cannot but continue to be reflected in the various types of price disparities that exist. Special measures will, therefore, be necessary for keeping such disparities within reasonable bounds.

Complete free trade undesirable.

6.2 The experience of the last few years has shown that unfettered private trade tends to have highly undesirable effects in a situation like the one that we are facing today. Foodgrains markets in India are essentially imperfect with the result that wide disparities in prices exist side by side. On the one hand, there are large metropolitan areas that often exert a considerable pull on markets in neighbouring rural areas. On the other, there are pockets of scarcity acting as epicentres of price rise. Complete free trade in a basic essential like foodgrains under these circumstances tends to aggravate price fluctuations and to impede the course of planned development.

Full control has difficulties.

6.3 Full control in the sense of complete rationing and procurement of the kind that we had before 1953 also does not seem desirable in the present circumstances. In the first place, complete rationing will involve a large increase in Government's commitments for maintaining supplies to the rationed population. This will require large stocks to start with and large imports thereafter as was our experience between 1948 and 1953. The demand is likely to go on increasing year after year. It is estimated that if complete rationing is introduced the total ration commitment in Bombay State alone will be about 17 lakh tons of foodgrains per year. There will be corresponding commitments for other areas too. In order to meet such large commitments Government will have either to import or to procure on a very large scale. Import on a scale larger than the present does not seem to be feasible. Large-scale procurement can be met only through some such rigid system as was in vogue in Bombay and Madras before

1953. But such a rigid system of procurement, whatever may have been its merits in an emergency, will be strongly resented by farmers if introduced as a regular feature in a developing economy and may have adverse effects on the production as well as marketed surplus of foodgrains. If the production and marketed surplus of foodgrains go down as a result of such procurement, the difficulties facing the country will increase rather than decrease before long. Complete rationing will not also in practice restrict consumption significantly for any length of time. As we have mentioned earlier, it has been the experience that leakages tend to increase in course of time. Not only does the number of ghost cards tend to increase, but foodgrains also tend to be smuggled into rationed areas and sold in the black-market even under the strictest regime of food controls. Complete rationing has also its administrative difficulties. Rural areas and small towns have necessarily to be left out. That means that while large cities and industrial workers may have assured supply of foodgrains at low prices under such a system, the non-farm population in rural areas may have to face accentuated shortages and high prices. This system is also likely to prove very costly. It is estimated that for the Bombay State alone the administrative cost of complete procurement and rationing would be about Rs. 5·6 crores per annum which may be compared with Rs. 14 lakhs, the present expenditure on the Civil Supplies Department. An extensive system of procurement and rationing would have a justification if it succeeded in preventing the rise in prices that might otherwise occur. This implies depressing the cultivator's return for the sake of the urban consumer. On this score alone the system may be found to be widely unacceptable. Moreover, if the Government enters the market on a large scale for the purpose of procurement, a large quantity of money will be injected into the system and this by itself may accentuate the inflationary trend.

6.4 On the whole, we think that full control should be resorted to only in cases of emergency like war or famine or extreme inflationary pressures. We do not visualise it as a permanent feature of our developing economy. In the remaining part of this chapter and in the following two chapters we set out our suggestions and recommendations in the matter of food and price policies which might be suitable for meeting the food situation as it is likely to be for some time to come. Our third term of reference requires us to make recommendations to ensure a level of prices which would provide the necessary incentive to the producer with due regard to the interest of the consumer and the maintenance of a reasonable cost structure in the economy. We consider that the terms are broad enough to include almost all aspects of food policy, including price policy for foodgrains and related commodities.

We have not been able to give as much attention to the longer-term aspects of encouraging food production as to questions of distribution and prices of foodgrains.

6.5 The solution to the food problem, in our view, lies between complete free trade and full control. Food controls involve regulation of consumption, production and trade. Comprehensive controls of the war-time type extend to all these three activities. But in less difficult situations, control of trading activity, supplemented by some regulations of consumption and directioning of production should be adequate and is, indeed, likely to give better results on the whole than full-scale control of distribution as well as supply. Such a *via media* will no doubt, also involve an appreciable degree of control, but that should be largely of a countervailing or regulatory rather than restrictive character. The type of controls that we envisage would be largely of a flexible and indirect character, designed to be adapted to changing situations and such as would not require an army of officials exercising restrictive powers for their implementation.

Countervailing measures—the solution.

6.6 The main objective of the type of controls that we have in view is to stabilise prices of foodgrains as also other related commodities as far as practicable. Price variations, as we have already explained, may be of three types: (i) temporal (ii) regional and (iii) sectoral, or price changes over time, over space, and price differentials of various sectors or groups of commodities. Price stabilisation of the kind that we have in view does not mean that all these variations should be eliminated. In fact a certain extent of variation is not only natural but also desirable. It is through variations in prices that allocation of resources and adjustment of supply and demand are brought about in the market. Of the variations over time, secular or long term trends should ordinarily not be interfered with. For instance, if on account of technological developments costs of production go down, it would not be desirable to prevent a corresponding decline in prices. Around the secular trends there are some cyclical price movements which arise as a result of the needed adjustment between demand and supply and create no special difficulty when they are moderate and gradual. But sometimes these movements tend to manifest very sharp rise or fall with the result that prices often get completely out of parity with costs and incomes. In such cases if a part of the excess production of a bumper year is carried over to meet the deficit in a subsequent lean year much of the distress resulting from the price fluctuation can be avoided and a measure of needed resilience imparted to the market. Further, within cyclical fluctuations there are certain seasonal fluctuations which are normal. There is some cost involved in the storage and carrying over of stocks from the harvest season to the lean season. It is, therefore, natural that prices should rise to that extent during the lean season. But often the rise in

Nature of price stabilisation.

prices is out of all proportion to this cost and it is this abnormal seasonal variation which requires to be guarded against. In a period of inflation even a small seasonal rise tends to stick and to accentuate the general tendency for prices to rise. Purchase of stocks in the harvest season and selling the same in the market at a reasonable price in the lean season is an effective way of preventing undue seasonal rise in prices. In a country like India where there is considerable transport difficulty and markets are imperfect it is only natural that there should be regional differences in price. To the extent that these regional variations are caused by transport difficulties they cannot be eliminated until the basic difficulty is overcome. But if semi-monopolistic elements in the trade exploit the regional variation taking advantage of the imperfections of the market, there is a strong case for the State to intervene with a view to keeping the prices within reasonable limits. If in a period of inflation or deflation prices in particular regions are allowed to go up or down sharply they generate similar movements in other regions. Hence, the prevention of regional variations becoming abnormally large is important in times of inflation or deflation. The long-term remedy for such disparities is no doubt the improvement of transport facilities and general economic development. But, in the short period considerable relief to the situation can be afforded by the State buying the surplus in surplus areas and meeting the deficit in areas where shortages exist. Finally, there may be an abnormally sharp rise or fall in prices of some commodities compared to that of others with the result that the cost of production of the commodities and the cost of living of the cultivators are affected very differently from what happens in the other sectors. Such distortions of the price structure also create considerable strains and stresses in the economy and if allowed to persist tend to change the consumption and production pattern in such a manner as may adversely affect the whole economy and also upset the allocation of resources envisaged in the Plan. It is important to prevent such sectoral imbalances also as far as practicable.

Rigid integration of price structure not desirable.

6.7 At the same time, any rigid integration of the price structure is neither feasible nor desirable. In the first place, such a policy would be very difficult to implement from the administrative point of view especially in a growing economy. Secondly, it may distort and obstruct to such a great extent the normal functioning of economic forces that it may result in more harm than good. So long as prices move gradually allowing costs and incomes to get adjusted, there is really not much to take exception to in such price fluctuations. Only such changes in prices as are liable to get far out of step with costs and incomes should be avoided. The main characteristic of a rational system of price stabilisation which seeks to avoid both

complete *laissez faire* and rigid control should be on the one hand to allow the trade to function on a competitive basis within certain broad limits and on the other to regulate it by suitable countervailing action, over-all as well as selective, by public authority.

6.8 Since imbalances in the economy are of different kinds and intensity, they lend themselves to treatment through varied combinations of measures of general or over-all control and specific regulation adapted to the nature and severity of the particular situation. Some of these actions have to be over-all, *e.g.*, monetary or fiscal and some have to be selective, *e.g.*, direct purchase and sale of particular foodgrains, licensing of dealers in foodgrains, etc. In fact according as the circumstances change the nature of the action to be taken as well as the types and combinations of measures must also change correspondingly. There may be some measures which require to be taken on a long-term basis while others may be of a relatively short term character, being liable to be altered according to the situation as prices show an abnormal rise or fall.

Monetary and fiscal policies.

6.9 The most important controls of an over-all character bearing on the level of prices are fiscal and monetary policies. The aspect of fiscal policy which has the most decisive impact on the general level of prices is the over-all state of the budget, *viz.*, the extent of the budgetary deficit or, taking receipts from public borrowing and small savings into account, the extent of deficit-financing. This is conditioned in turn primarily by the volume and phasing of developmental expenditure as well as the extent of foreign assistance available. If the magnitudes of deficit-financing, together with development expenditure offset partly by foreign aid impose a measure of strain on the economy that makes a certain rise in prices inevitable, then any other measures that may be taken can only modify to some extent the impact of that rise in prices but cannot completely obviate it. Even monetary and credit policy in such circumstances assumes a subsidiary role to the primary influence of fiscal policy and Governmental policy regarding the development programme. Indeed, monetary and credit policy has to a considerable extent to be adapted to the economic climate created by the general state of fiscal policy or the budgetary operations of Government. If these operations themselves give rise to considerable inflationary tendencies, while the ability of monetary and credit policy by itself to restrain such tendencies is limited, its general tone is indicated by the extent of such tendencies. In this context, while a general cheap or dear money policy may produce a certain effect on over-all price trends, it can be usefully supplemented by a policy of selective credit control for preventing abnormal fluctuations in prices of particular essential commodities like foodgrains, as has been shown by recent

experience. Selective credit control has, therefore, to be continued to be used as a flexible instrument of some proved efficacy to curb any undue speculative tendencies. Export and import quotas and duties can also be manipulated with a view to regulating the prices of important commodities having a bearing on food prices which are exported or imported on a significant scale. Excise taxes and subsidies are other fiscal tools available to influence the consumption and production pattern of various commodities in the desired direction.

Regulatory measures

6.10 While the general climate would thus be set by appropriate fiscal, monetary and credit policies, it is obvious that in the general economic and monetary situation that is likely to prevail for some time these have to be supplemented by certain specific action directed to controlling foodgrains and also in respect of related commodities if comparative stabilisation of their prices is desired. These measures are, however, to be used judiciously and in different combinations under different circumstances.

6.11 For the present it should ordinarily be sufficient to undertake open market purchase and sale of foodgrains by the Government as a regular measure, socialise part of the wholesale trade, exercise control over traders operating in the rest of the market through a system of licensing, maintain a sizeable reserve stock of wheat and rice, arrange for the regular import of a certain quantity of rice and wheat and organise propaganda for the consumption and production of subsidiary food.

6.12 But in a period of rising prices it would be necessary to supplement the above by much larger imports, direct sales of cereals by Government through modified ration shops, formation of zones with a view to preventing cross-movements and undue pressure on local supplies and limited compulsory procurement by Government in surplus areas for replenishing its reserve stocks. In periods of sharper inflationary trend the above may have to be further supplemented by compulsory issue of wheat (the supply position of which is relatively easy) along with rice (of which the supply position is more difficult) from modified ration shops, announcement of prices at which Government will requisition surplus stocks and temporary cordoning off of big cities like Calcutta, Madras, Bombay, etc., if the over-all food situation deteriorates.

6.13 In periods of sharp deflationary trends, on the other hand, the action to be taken should include announcement of guaranteed minimum prices supported by accelerated purchases of foodgrains in the open market by Government, subsidised sale of fertilisers, iron and steel, etc., to farmers and acceleration of local development works in depressed areas.

6.14 In our view, the formal announcement and effective enforcement of minimum prices throughout the country should be necessary in conditions when there may be a possibility of prices falling sharply. The cultivator does require the assurance that prices will not be allowed to fall below economic levels to maintain his incentive to invest in the improvement of his farm and, thereby, sustain the basis of progressive agriculture. This assurance will, in our view, be available if the general framework of our recommendations is accepted and it is decided to set up an organisation charged with the function of operating in the market and equipped with resources to do so and to counteract through its operations the amplitude of fluctuations which tend to occur. Over and above this, we believe that assurances of the kind that Government recently extended through its Press Note on 14th June, 1957 to which reference has been made toward the end of Chapter III could have a limited use in reinforcing the confidence in Government's policy in this sphere. If, however, certain areas are cordoned off for facilitating certain operations, the announcement of a minimum price would become essential.

Co-ordinating authority.

6.15 Market operations will obviously have to be carefully planned and conducted from time to time in different commodities, in larger or smaller areas and in varying magnitudes according to need. It is necessary for this purpose to have an effective organisation for keeping a constant watch over the situation, making a realistic assessment not only of current trends, but also future prospects, and prescribing measures to be taken under different circumstances as well as an adequate machinery for carrying on the necessary market operations. We consider that to ensure a level of prices which would provide the necessary incentive to the producer with due regard to the interest of the consumer and the maintenance of reasonable cost structure in the country, as stated in our terms of reference, it is essential to set up such an organisation and machinery for co-ordinated formulation of measures to be taken from time to time to this end, and implementation of the action proposed by way of market operations within the range of prices and subject to the conditions determined.

6.16 We recommend, therefore, firstly, the setting up of a high-powered authority for the formulation of the policy for price stabilisation in general and determining the programme for enforcing it from time to time and, secondly, the establishment of a suitable organisation to execute that part of the policy and programme framed by this authority as may relate specifically to purchase and sale operations in the field of foodgrains. The policy-making body may be called the "Price Stabilisation Board" composed of representatives of the Ministries of Food &

Agriculture, Finance, Commerce and Industry and Railways, Planning Commission and the Reserve Bank of India, with a Chairman of the status of Secretary to the Government of India. Food, no doubt, forms the core of our price structure, but prices of competing crops like cotton or oilseeds and of industrial products like cloth, fertilisers, iron and steel etc., are all very important from the point of view of an effective price policy for the country and have to bear a reasonable relationship to food prices. It is only a high-level authority as proposed above, which is properly integrated into the machinery of decisions within Government on economic questions, that will be able to deal effectively with the problem of price stabilisation. The Board should examine not only the food prices as such, but also the prices of all related consumer and producer goods, *e.g.*, cloth, oilcakes, fertilisers, iron and steel, etc., study the various margins charged at different stages before sale to the cultivator and make appropriate suggestions. It should be possible for a vigilant Price Stabilisation Board to help in maintaining a reasonably stable price structure by ensuring better co-ordination of the various measures bearing on prices of foodgrains and other related commodities. As regards the executive organisation for dealing specifically with foodgrains, we think that it would be desirable to set up under the Ministry of Food and Agriculture a separate body called the "Foodgrains Stabilisation Organisation". We propose to discuss in some detail the nature and functions of this Organisation in the next chapter.

Central Food Advisory Council.

6.17 It will also be desirable to set up a body of non-officials called Central Food Advisory Council to assist the Food Ministry and the Price Stabilisation Board. The Council should be composed of representatives of agriculture, trade, industry, workers, consumers, banks, co-operatives, leading political parties and economists. It will meet as often as necessary but at least twice a year in connection with the kharif and rabi seasons. It will consider the various aspects of the food problem, long-term as well as short-term. Its views will be placed before Government and before the Price Stabilisation Board to help the latter in the formulation of price policies and programmes.

Prices Intelligence Division.

6.18 It will be necessary for the Board to have at its disposal not only all relevant statistics but also related intelligence. An organisation for collecting all relevant intelligence should, therefore, be built up with a senior officer as head who will also act as Secretary to the Price Stabilisation Board. An all-India average index of wholesale prices cannot bring out adequately the various—regional and sectoral—disparities which create difficulties in the economy. If, on the other hand, there are suitable regional indices as well and a watch is kept over them also, one would be able to know from the way that pressure

points develop in the economy as to what is the real source of trouble, what is the real impact of it and its likely significance in the future. As we have mentioned earlier, it is these disparities manifesting themselves in different regions and different sectors which are often the early symptoms of wider imbalance in the economy. Timely diagnosis of the disease may help in appropriate remedial action. This Division could also initiate action to have information collected and indices prepared for such important items as inventories, investment in the economy, employment, wages, rent, etc., besides wholesale prices and cost of living, with a view to filling the significant gaps in essential economic and price data and enabling a more adequate measurement of trends for all important sectors of the economy both functional (*e.g.*, consumption goods and investment goods industries) as well as regional (*e.g.*, those characterised by marked heterogeneity and lack of mobility, etc.). Information about cost of production should also be organised for different commodities and different regions. Indices should also be prepared of prices received and prices paid by agriculturists and ratio of prices of competing crops in different regions. Data regarding market arrivals, market stocks, market sentiment etc., should also be regularly collected from all important mandis and studied along with trends of production and prices. We have noticed that at present considerable misunderstanding is being caused in the public mind by the concentration of attention on the wholesale price index alone. The Division should be able in due course to supply a corrective to this situation by presenting a much wider series of indices relating to prices, incomes and employment in a co-ordinated and easily intelligible form to the general public from time to time.

CHAPTER VII

FOODGRAINS STABILISATION ORGANISATION

Stabilisation of food prices.

7.1 In the previous chapter we suggested that with the help of the Central Food Advisory Council and the Intelligence Division recommended, the Price Stablisation Board may keep a careful watch over the price situation and recommend necessary action from time to time for maintaining not only the general price level reasonably stable but also for preventing undue disparities between the price trends of various commodities. Since prices of foodgrains constitute the real core of our price structure and present special problems, it will be necessary to take specific action for stabilising the prices of foodgrains as such. Prices of foodgrains can be successfully controlled only through controlling the demand and supply of foodgrains. The way in which demand and supply of foodgrains can be regulated is through undertaking timely and effective purchase and sale operations, arranging for necessary procurement and imports and maintenance of sufficient stocks. The Ministry of Food & Agriculture will continue to be generally responsible for all these operations as also for other measures like licensing of trade, organising fair price shops, imposing cordons and zones, etc., which we recommend later. We consider, however, that for the specific functions of open market purchase and sale, procurement of foodgrains and maintenance of stocks it will be desirable to have a separate organisation called Foodgrains Stabilisation Organisation under the Ministry.

Foodgrains Stabilisation Organisation.

7.2 This Organisation will not only take over a part of the work that the Directorate General of Food is handling now but will also operate as a trader in the foodgrains market, with branches or agencies of its own in all important mandis, particularly in surplus areas and centres of distributive trade. This Organisation may either be a department of the Ministry or a statutory corporation or a limited company. Each of these alternatives has its advantages and disadvantages. Considerable experience of all these three forms of organisation is available to Government who will be in the best position to consider what the right organisation for such a purpose should be. We have not been able to estimate how much working capital will be required by this Organisation. It should, not, however, be more than what was required by the Food Administration during the days of control. We feel that in the beginning this Organisation should be able to manage with a capital of about Rs. 100 crores, which may subsequently be increased as its business expands.

7.3 The most important work which this Organisation will be required to undertake is what are commonly known as buffer stock operations. In our view, buffer stock operations can be a most effective instrument for the stabilisation of the prices of foodgrains. The main idea of such operations is simple. Whenever prices tend to fall, even if such a fall is not general but is confined to a particular locality, this Organisation should step in and start purchasing at reasonable prices. Similarly, when prices tend to rise, this Organisation should sell at reasonable prices. The Organisation will, from time to time, have to fix limits of prices at which it would buy or sell, within the range of prices for its operations which will be fixed by Government on the advice of the proposed Price Stabilisation Board. If the Organisation starts operating from a position of strength, with sufficient stocks at its disposal and sufficient funds to invest, it will soon find itself in the position of a dominant trader in the economy and will be able to control the market effectively. It will then be able to counteract the market trend seeking to depress prices when the market is rising and support prices when the market is falling. This would thus go a long way to protect both the producer and the consumer against violent fluctuations in prices. Such operations have a particularly beneficial effect on commodities like foodgrains, the production of which is essentially dependent on weather conditions and, therefore, highly variable. If the surplus production of the bumper years could be taken over to years of short crop there should normally be little difficulty. Although traders also normally carry some stock, they tend to make undue profits whenever a shortage occurs. Moreover, in the bumper year when prices fall to very low levels, part of it is wasted, part is consumed and the surplus that may normally be taken over to the year of short crop becomes relatively small. Hence, if the Foodgrains Stabilisation Organisation proposed by us purchases the surplus crop of a bumper year and carries it over to future years of short crop, it will not only even out fluctuations but will also be able to make a reasonable profit in the process. It will also be able to operate flexibly inasmuch as it would have sufficient room for manoeuvre in regard to the regions of procurement operations and prices. The Government will, no doubt, indicate to it, from time to time, the broad range of prices within which it might work, but it will, nevertheless, have a substantial flexibility of operation and should under normal circumstances be able to effect sufficiently large purchases. Its own agencies in all important mandis should ensure for it a fairly substantial volume of business. Besides, it should also be able to purchase fairly large quantities from depressed pockets where competition from the trade is usually weak. The Organisation will normally be buying in the harvest season and in the depressed pockets and selling in the lean season either of the same year in which it buys or in a subsequent year when there is a short crop. Therefore,

Buffer stock operations.

ordinarily, there should be no risk of loss for such an organisation, especially over a long period of, say, 5 years. Even if there is some loss, it would be a worth while premium to pay for insurance against instability.

7.4 In the initial stages this Organisation may face stiff competition from traders. But since it will be a Government-sponsored organisation with large capital and network of agencies, it should be able soon to acquire for itself a position of strength and to dominate the market. Government, in our view, should also take special measures to build up a position of strength for this Organisation in the early stages, by way of credit and transport facilities. One should, of course, proceed gradually and not take any action which may unduly upset the market in the near future. But we feel that step by step conditions should be created so that in course of the next 3 or 4 years the Foodgrains Stabilisation Organisation may be in a position to control a substantial proportion of the wholesale trade in the country.

Socialisation of trade.

7.5 We would like to emphasise here that until there is social control over the wholesale trade we shall not be in a position to bring about stabilisation of foodgrains prices. Our policy should, therefore, be that of progressive and planned socialisation of the wholesale trade in foodgrains.

Experience of other countries.

7.6 We may point out that our proposal is by no means a very novel or revolutionary suggestion. In almost all the important countries of the world, agricultural commodities in general and foodgrains in particular have been subject to greater State intervention than non-agricultural products. For instance, in Canada there is little free trade in wheat. The Canadian Wheat Board, which is a Crown corporation, has internal and external trade monopoly in regard to the wheat grown in the country. Privately-owned elevator companies and producer organisations act as agents of the Board for the purpose of purchase, storage, local sale and delivery to terminal points in accordance with the Board's instructions. As regards price, at some date prior to the announcement of the crop year a price is established at which the Board purchases. This serves as the minimum guaranteed price. The price varies from time to time according to market conditions. In Australia there is a rigid monopoly procurement and distribution of wheat. The Australian Wheat Board is the sole authority for the marketing of wheat within Australia and for the marketing of wheat and flour for export from Australia. Within the country the Board sells wheat in wholesale lots, mainly to flour mills and processors. In export trade, all wheat is sold by or on behalf of the Board. Marketing of rice in Burma is subject to Government influence and control. The State Agricultural Marketing Board has opened numerous buying

depots throughout, the country and paddy is bought at these depots at fixed minimum prices. This paddy is got milled and made available for internal consumption at stable prices as well as for exports. In the export trade the Board has a virtual monopoly. In Italy, paddy is totally subject to compulsory deliveries to Government. The price accorded to producers of paddy is not guaranteed as its price depends on the trends of foreign markets. The paddy growers receive an advance payment on delivery, and the balance is paid later on final settlement of accounts. In the case of wheat, a system of partial compulsory delivery is in force under which quota ranging from one-third to one-half of the available production is offered by the farmer on the free market at a price fixed by an Inter-Ministerial Price Committee. In Japan, rice which is the principal foodgrain consumed, is purchased on a monopoly basis by the Food Agency of the Government and sold under a rationing system at a fixed price. In the case of home-grown wheat and barley, there is no monopoly procurement by Government. But the Food Agency is authorised to purchase unlimited quantities of domestic wheat and barley that may be offered by producers and traders at parity price plus certain additional payments. Hence, our proposal that the Foodgrains Stabilisation Organisation should have a dominant share in the foodgrains trade in the country should not be regarded as something which is extraordinary.

Operational problems.

7.7 It is not really necessary that this Organisation should itself undertake all the operations. In fact like the Canadian or Australian Wheat Board it may operate through the agency of licensed whole-sale dealers or rice and flour mills or co-operative societies. It may also make use of the Departments of Civil Supplies and Marketing of State Governments. In addition, it may have its own purchase and sale offices too. The important thing, however, is that any agent that it may employ should not be permitted to trade on his own account. If the prices offered by it as also the handling charges and agency commissions are reasonable, we have no doubt that this Organisation will be able to procure, buy and sell quite large quantities in the open market under normal conditions.

7.8 This Organisation should, however, generally try to complete its purchase operations within three months of the harvest. While the minimum price should normally remain the same throughout the year, it may offer a slightly higher price by way of bonus during the first two months of the harvest so as to encourage the farmers to bring their produce to the market earlier. Similarly, the Foodgrains Stabilisation Organisation should try to sell that part of its stock which requires early turn-over and also a part of its surplus stock in the lean end of the season. This it can do in two ways. In the first place, it should sell

to the State Governments for distribution through modified ration shops, co-operative shops, employers' shops etc. For this purpose the Foodgrains Stabilisation Organisation should charge State Governments a price which should cover its cost inclusive of a prescribed profit. Any subsidy required should be paid by Government which should also be responsible for organising and supervising sales from these shops. The Foodgrains Stabilisation Organisation should have no responsibility for retail distribution. In the second place, it should sell in the open market in other places at a price approximating the market price. It is this second type of sale which will be really an important method for preventing undue cyclical, seasonal or regional fluctuations in prices in ordinary times. While sales through modified ration shops, etc., will provide relief to the people with low purchasing power, open market sales will help keep the disparity between ration shop price and open market price within reasonable limits. The adequacy of supplies with the organisation will be the general limiting factor in the situation and the operations will have to be regulated with careful regard to the necessity of effecting a balance between the demand on the Organisation and the supplies available to it, at given prices.

7.9 This Organisation should have warehouses in important producing and consuming centres including deficit areas. The warehouses in the surplus producing areas will be naturally small ones—of a collecting and transit type—while those in the important transport points or deficit areas will be bigger ones—of a storage type. With the establishment of the Foodgrains Stabilisation Organisation, proposed by us, the development of the activities of the Warehousing Corporation should be integrated with the operations of the Organisation and the facilities provided by the Corporation should be fully available to the Organisation.

Some form of compulsory procurement necessary.

7.10 Although we believe that the Foodgrains Stabilisation Organisation will be able to control a large part of the marketable surplus during normal years, in the immediate future so long as inflationary trends continue and food shortage persists, open market purchases may push up prices so that the Organisation may find it necessary to stop its operations. Therefore, it will be necessary to undertake some form of compulsory procurement for replenishing the reserve stocks and maintaining supplies to vulnerable sections of the population at reasonable prices.

7.11 If the supply position of wheat within the country, taking account of the large imports of wheat available from other countries, both on commercial and concessional terms, continues to be easy, and the Foodgrains Stabilisation Organisation is able, through its usual open market operations, to purchase a fairly substantial quantity of wheat in a normal year, it may not be necessary to take

any special measures to procure wheat. In respect of millets, too, the Organisation may ordinarily rely upon whatever quantities could be purchased in the course of open market operations.

7.12 So far as rice is concerned, however, we shall require over a million tons every year for meeting the needs of highly deficit areas and vulnerable groups. Fairly large quantities will be needed for buffer stocks also. The availability of rice in the world markets is, however, rather limited and the price is also high. Besides, we are faced with a serious shortage of foreign exchange at present. As in the case of wheat and millets, we cannot afford to depend upon open market purchases by the Foodgrains Stabilisation Organisation for meeting this minimum requirement. In a situation of shortage of the type that is likely to be experienced in respect of rice during the next few years, the chances are that if the Foodgrains Stabilisation Organisation were to make open market purchases the trade may be able to out-bid it. We cannot afford to take such a risk so far as rice is concerned. It will, therefore, be necessary to resort to some form of compulsory procurement to ensure that at least 6 to 7 lakh tons of rice is procured from the surplus areas in the country. Although, as stated above, our requirements of rice for building up buffer stocks are large, it is of the nature of buffer stocks that they cannot be procured out of a deficient supply situation internally. They have either to be built up out of imports, or if these are not available in the desired amount, have to await a good bumper harvest. Internal procurement can be effected or stepped up only under adequate safeguards, and with some controls over transport and credit at one end and over distribution at the other. Some control over distribution is indicated as necessary with a view to ensuring that the supplies which have been specially procured at reasonable rates are made available to the needy consumer at such rates.

Limited compulsory procurement.

7.13 There are several ways in which compulsory procurement may be enforced. The simplest way would perhaps be to cordon off certain areas and make the Foodgrains Stabilisation Organisation the sole buyer in these areas for the purpose of export. States of Orissa and Punjab should remain cordoned off and the export of surplus rice from these States should be controlled by the Foodgrains Stabilisation Organisation. Although Orissa is a surplus State, the pressure from Calcutta, Jamshedpur and other industrial areas of West Bengal and Bihar with high purchasing power often denudes it of its stocks, raises prices abnormally and creates distress for the local population. Cordoning off of Orissa is, therefore, a necessity. So far as Punjab is concerned, rice is being produced mainly as a cash crop for export and the production has gone up considerably in recent years. Hence,

cordoning off of the whole of that State for the purpose of procuring rice should not create any special difficulty. We believe that in a normal year it should be possible for the Organisation to procure about 3 to 4 lakh tons of rice in Orissa and Punjab. The delta districts of Andhra Pradesh and the Chhattisgarh area of Madhya Pradesh are also generally surplus in rice. It should also be possible to export to States not included in the present rice zones—the continuance of which we recommend later—3 to 4 lakh tons from these two areas without upsetting the local price structure. On the other hand, if these States are cordoned off as a whole or an attempt is made to take away from these areas larger quantities, the present zonal balance may be upset causing considerable difficulties. One way, therefore, may be that every year only 2 or 3 districts in these areas which are likely to yield the requisite surplus may be cordoned off, and the entire surplus mopped up. Alternatively, the whole area may be cordoned off and out of the surplus procured certain quantities, say, 2 lakh tons from each area may be taken away from the State and the balance sold back in other areas of the State itself. We are in favour of this alternative. Under this alternative the districts of Tanjore and Tinnevely in Madras would also be cordoned off for procurement of rice, which should then be released to the deficit areas within the southern rice zone itself. If it is decided to impose any cordon for the purpose of procurement in a few districts of a State, it would be essential not only to ensure that the prices ruling in the cordoned districts are reasonable and are not substantially lower than those obtaining at least in the harvest time in neighbouring districts but also to provide special Grow More Food assistance to the farmers of the cordoned districts to obviate any sense of grievance that the rest of the country is exploiting them unduly.

7.14 If it is felt that in any area cordoning is not practicable for some reason, one or more of the following systems of procurement may be tried according to local conditions and the relative proportion of the quantity to be procured to the quantity produced. One alternative may be a levy on all rice and flour mills as also on all private traders making purchases in major primary mandis. This method will work *only* if the quantity to be procured is relatively small compared to the total production and the levy price approximates to the market price at the harvest time. Another alternative is a fixed levy of foodgrains for every acre of land which a farmer possesses above a fixed limit, say 10 standard acres.* Another

*A standard acre may be defined here as for the land census, *viz.*, "It may be possible to assign the value of 'sixteen annas' to an average acre of irrigated land or other land of good quality in a State and correspondingly lower or higher values in 'annas' to other classes of land. Land carrying a valuation of sixteen annas may be described as a 'standard acre'. Values may be assigned to different classes of land in different districts or smaller sub-divisions."

method may be to collect the price of fertilizers and repayment of loans given by Government in the form of grains, the prices at which grains have to be evaluated being fixed previously. This method, we are afraid, may not be feasible until state-owned or co-operative warehouses are set up in sufficient numbers in the areas concerned. Credit given by co-operative societies may be also linked with the marketing of grains and all grains collected by co-operative societies purchased by the Foodgrains Stabilisation Organisation at an agreed price. This method also, we feel, may not be feasible in the areas concerned until the co-operative movement has made very considerable headway. It has been suggested to us by many witnesses that land revenue and irrigation charges should be collected in grain. This proposal has some merits as well as several demerits and on a balance of considerations we do not recommend it. The main attraction of this proposal is that it will enable fairly large quantities to be procured without creating undue resentment. On the other hand, since most of the payments will be small, the cost of collection will ordinarily be very large. The total cropped area in the country is over 360 million acres and the incidence of land revenue per acre of cropped area is only Rs. 2·24 on the average. Also the dangers of corrupt practices by petty officials will be large.

Fixation of prices.

7.15 It has been suggested to us by a number of witnesses that maximum prices should be announced every season when price trends are inflationary and Government should take powers to requisition stocks whenever prices go beyond these levels. At the same time, for allaying fears of the farmers that prices may be depressed as a result of zones, cordons and other Government action, minimum prices should be also fixed at which Government should be prepared to buy whatever quantity is offered. These prices should be varied from season to season in the light of various factors, *e.g.*, trends of costs, incomes, price parities. We agree that various relevant factors, *e.g.*, cost of production of the concerned foodgrains and competing crops, cost of living of the agriculturist and industrial labour, relative movements in prices of food crops and cash crops, and in incomes of agricultural and non-agricultural workers, may be examined. In the light of all this information and in consultation with the Central Food Advisory Council the range of prices within which the Foodgrains Stabilisation Organisation may carry on its operations may be determined every year and from time to time by the Price Stabilisation Board. It is, however, important that no single formula should be announced or relied upon. While a number of formulae may be taken into account, we recognise that the final decision would have to be taken by the Board on a somewhat *ad hoc* basis, particularly owing to the importance of prospective price trends in any assessment of the reasonable prices which might guide the

operations of the Organisation, for no formula can satisfactorily reflect the prospective position. It has, indeed, been the experience of most countries that no formula can fully cover all contingencies. On the other hand, adoption of a particular formula makes the price policies so rigid that it becomes very difficult to introduce any flexibility even when broader considerations require it. Besides the prices at which the Foodgrains Stabilisation Organisation should be prepared to buy whatever is offered to it and which it should announce at suitable times, the administration should have powers to fix the prices at which the State should be prepared to requisition stocks hoarded by traders or big producers. At present, there is a provision that the Government can requisition any stock by paying the average price for the previous three months. We understand that this provision is creating considerable difficulties in practice. We consider that powers should be obtained to give statutory recognition for the purpose of requisitioning at the prices that may be fixed by the Price Stabilisation Board as suggested above. For the current year we feel that prices for coarse paddy may be fixed at between Rs. 9·25 per maund and Rs. 11 per maund and of rice between Rs. 15 and Rs. 17 per maund for fair average quality which will be considered generally reasonable all over the country. Similarly prices for wheat between Rs. 13 per maund and Rs. 15 per maund for fair average quality would be considered such as would give a reasonable incentive to the producer and be fair to the consumer and would also pay due regard to the cost-structure in the country.

7.16 We would like to reiterate that the prices at which the Foodgrains Stabilisation Organisation would be prepared to buy should be economic prices and should be kept reasonably stable to give confidence to the producers.

Licensing of food-grains dealers.

7.17 One of the key measures that will be necessary for making the system proposed above really successful will be the licensing of all dealers in foodgrains. We feel that an Order on the lines of the Foodgrains (Procurement and Licensing) Order, 1952, should be issued and strictly enforced. All the traders and big producers in the country who may deal in and stock more than 100 maunds of foodgrains should be required to take a licence. One of the terms of the licence should be that traders will submit fortnightly returns of their stocks, sales and purchases to the prescribed authorities. A further clause may also be added to the licence to the effect that the traders will stop purchase or sale in the district concerned whenever Government may order them to do so and that they will also confine the sales or despatches to particular areas if Government so direct them. We feel that these powers may not have to be exercised ordinarily but it will nevertheless be useful to have these powers.

7.18 One of the most important tasks of the Foodgrains Stabilisation Organisation would be to build up and maintain adequate reserve stocks as distinct from any buffer stocks that it may build up from operational considerations. It was the experience in 1955 that even a stock of 1·5 million tons was not sufficient when a real crisis began. Stocks were depleted rapidly as soon as prices started rising but it was not found practicable to replenish them. We are aware that the Government have taken a decision sometime back to build up a reserve stock of 2 million tons, half of wheat and half of rice, but we are nevertheless emphasising the point in view of the fact that even now the stocks are less than 50 per cent. of the target. It is very important that the Government should not only maintain a reserve stock of at least 2 million tons as decided by them but should arrange for adequate replenishments as soon as they tend to fall below that figure. One advantage of these reserve stocks being maintained by the Foodgrains Stabilisation Organisation would be not only to facilitate storage but also to ensure timely turn-over. Reserve stocks as distinct from buffer stocks should be maintained at certain special points. In our view, these points in order of preference should be (a) ports and metropolitan areas, (b) chronically deficit areas, (c) areas generally affected by floods and drought and (d) important centres from the point of view of transport, *e.g.*, Mokameh, Manmad, Nagpur, Kanpur. Adequate arrangements should be also made for revolving this stock and this turn-over operation should be undertaken in a manner such that it may not unduly upset the market. Turn-over operations of the reserve stocks will be also facilitated by the maintenance of a large number of fair price and modified ration shops that have already been set up in the country and the continuance of which we recommend in the next chapter. **Reserve stocks.**

7.19 We would like to emphasise in this context that it will not be possible for the country either to build up necessary reserve stocks or to meet the requirements of the vulnerable groups of the population without substantial imports during the next few years. As we have already explained, our food supplies will continue to be marginal for a long time to come, and an annual import of the order of 2 to 3 million tons will be required for some time to come. From the point of view of food administration, import has a certain advantage over procurement. All the imported grain comes into the hands of the authorities and the entire amount is available for distribution. On the other hand, procurement can only be a fraction of the production. Although during inflation procurement becomes unavoidable, it gives a spurt to the price level which does not get fully corrected when the procured quantity is released. **Imports.**

7.20 We should, therefore, be prepared for importing a substantial amount of foodgrains during the next few **Long-term agreement with Burma**

years. Our main difficulty, however, is likely to be in regard to rice. The bulk of our people consume rice and their consumption is likely to out-pace production of rice. On the other hand, the supply position of rice in the world market is still difficult. The world exports of rice have not yet reached the pre-War level, while the demand from countries like Japan and Ceylon has increased considerably during the last few years. Our existing agreement with Burma provides for only 5 lakh tons of rice in 1958 and 3·5 lakh tons in each of the two subsequent years. The prospects of imports from other exporting countries are smaller still. It may, however, be possible to obtain some more quantities from Burma. It is, therefore, important that we should make every effort to enter into a long-term arrangement with Burma. India's share in the total exports of rice from Burma stood at 41 per cent. in 1954; this share declined to 17 per cent. in 1955 and to 15 per cent. in 1956 but increased to 25 per cent. in 1957. As rice is the main source of foreign exchange for Burma, the Government of Burma appointed a Special Committee in June, 1956 to make recommendations for planned development of rice acreage during the four years 1956-57 to 1959-60. The Government of Burma have planned for an increase in the acreage under paddy by 12 lakh acres in this 4-year period. They are also planning an increase of exports of rice by 2 lakh tons per year for the next few years. Already, the exports of Burma have gone up from 14·6 lakh tons in 1954 to 20 lakh tons in 1957, an increase of 5·4 lakh tons in 4 years or an average of 1·3 lakh tons a year. With the prospect of Burmese exports being stepped up by 2 lakh tons per year in the next few years, it should be possible for Burma to export upto 8 lakh tons of rice per year to India. At any rate, it is possible to obtain from Burma larger quantities of rice than are provided for in the existing five-year agreement. The question as to what form any long-term agreement with Burma should take may be examined by Government.

Agreement with the U.S.A. under P. L. 480.

7.21 If more rice could be available from the world market, we could, no doubt, import some more with advantage but as things stand today it is not likely that we would be able to get more. It will, therefore, be necessary to make up the deficiency by wheat. Moreover, with increasing urbanisation, the consumption of wheat is increasing in the country. For that reason also it would be necessary for us to import substantial quantities of wheat during the next few years. As we have mentioned in Chapter V, the world supply position is relatively easy so far as wheat is concerned. In fact, a sizeable surplus is available in the United States which may be made available on concessional terms. We feel that it would be to our advantage to take fairly large quantities of wheat and some quantities of rice from the U.S.A. under P.L. 480. For imports under such concessional terms not only relieve us of our immediate foreign exchange commitments but

also help us to build up a rupee fund which can be utilised for development purposes. One of the conditions of P.L. 480 is that we should continue to import our normal requirements at ordinary commercial terms. This means that we shall have to continue to import about 5·5 lakh tons of wheat from Australia, Canada, U.S.A. and other countries under normal commercial terms. We feel that all this import of rice and wheat supplemented by some quantities of coarse grains will continue to be necessary if our development outlay is maintained at the level proposed in the Second Plan.

7.22 With long-term agreements concluded with U.S.A. and Burma, India would be able to assure herself of certain quantities of foodgrains from abroad in the years to come. That assured supply of foodgrains from abroad would enable the formulation of a stable and long-term food policy needs no emphasis. In fact, assurance of continued imports of certain quantities of foodgrains will constitute the very basis of a successful food policy for some years to come.

CHAPTER VIII

SHORT PERIOD MEASURES

8.1 So far we have reviewed the long-period measures necessary to assure a minimal control of supplies whether through internal procurement or through better flow of imports. The essential reason of such control over supply, however, lies in the need to make available foodgrains at reasonable rates to the consumer, particularly the vulnerable sections of the consuming public. We propose now to refer to some short-term measures relating to control of distribution and trading in foodgrains as well as certain miscellaneous matters including food administration.

Fair price shops.

8.2 An important method for distribution of Government supplies which provides for a measure of relief to consumers through assuring them the benefit of Government procurement operations at reasonable rates is by selling foodgrains through fair-price shops* or modified ration shops* or through institutions like co-operative societies or employers' organisations. Consumers' groups should be encouraged to form cooperative shops and large employers of labour should also be persuaded to run their own fair price shops. Where such shops cannot be set up, Government should set up their own shops. In some areas it may be more convenient to entrust these shops to the trade. But in such cases there should be a strict system of supervision to check corruption and a system of identity cards should invariably be introduced.

8.3 Sales from fair-price shops, etc., should be normally made on a "no profit no loss" basis so far as Government is concerned. This in itself should prove to be of benefit to a large group of people. In view of its relatively easy supply position, wheat may be issued freely upto a full quota of 12 oz. per adult per day from these shops, since every one will be free to supplement from the open market. The issue of rice, which is in short supply, may ordinarily be not more than 8 oz. per adult per day in South India, 6 oz. per adult per day in East India and 4 oz. per adult per day in other areas. Moreover, this amount should be issued only if the purchaser agrees to take the balance of 12 oz. in the shape of wheat. This will not only help in economising rice but also in popularising wheat. In allocating supplies to different areas care

*A fair price shop may or may not have identity cards or limit on sales. A modified ration shop can sell only a limited ration against a card while the cardholder can supplement it from the open market.

should be taken to keep in view local preference *e.g.*, par-boiled rice should be supplied to Calcutta, Punjab wheat should be supplied to Delhi and so on as far as practicable as otherwise the pressure on the market for the supply of the preferred variety increases unduly and thus gives rise to a price spiral. Besides, superior and inferior qualities of grain need not all be sold at the same price. There should be separate prices fixed for fine, medium and coarse rice and similarly for indigenous and imported wheat on the basis of market preference. There should be no objection, for this purpose, to charging higher prices for the more preferred varieties even compared to the "no profit no loss" price utilising the proceeds for reducing the pool price on the less preferred variety. It has been represented to us that if the same price is charged for more preferred and less preferred varieties then the pressure on the fair-price shops tends to be very erratic. It goes up suddenly when the more preferred variety is issued and goes down suddenly when the less preferred variety is supplied. Similarly, there seems to be a good case for making a small difference in price between the harvest season and the lean season. The grain becomes more dry in the lean season when the consumers are also used to paying a higher price. If the sale price from the fair-price shops is raised to a small extent in the lean season that would only follow the normal seasonal pattern and would have a healthy effect on demand. Besides the "no profit no loss" basis may be applied in terms of even a longer period than what is taken as the basis of the present calculations. On the whole, some of the above suggestions amount to making the sale operations of the fair price shops less rigid and more responsive to market considerations than they are at present. As such they are calculated to reduce the malpractices and corruption observed in their working, to which we refer presently.

Subsidised sales.

8.4 While sales from fair-price shops should be normally made on a "no profit no loss" basis as suggested above, there will always be a number of people in different areas served by a fair-price or modified ration shop for whom even that price will be too high. Suitable provision may be made for providing relief to such distressed groups of population. Whatever subsidy the Government can afford to pay should ordinarily be reserved wholly for such distressed groups and not distributed equally to all purchasers of foodgrains from fair-price shops as is the case today. We recognise that the selection of such distressed persons will present some difficulty. But we feel that a practicable solution may be to give to each fair-price or modified ration shop a limited number of what may be called "relief quota cards". The issue of these cards may be limited to special categories of persons *e.g.*, expectant and nursing mothers, sick and convalescents, teen age children of families below a certain *per capita* income limit. The distribution of these cards may be looked after by a responsible

Government officer in consultation with a small representative committee of citizens of the locality. A rule should be made that in no case should subsidised grain be sold except on the basis of "relief quota cards". At present whatever subsidy Government is able to provide seems to get dissipated over a large number of recipients each of whom gets only a small relief. In the system proposed by us while a larger number of people will get moderate relief from the normal sale of unsubsidised grains through fair-price shops, a smaller number of really distressed people will get much more substantial relief from the sale of subsidised grain on the basis of relief quota cards.

Supervision. 8.5 Several complaints of corruption have come to our notice against the operation of fair-price shops. Most of these corrupt practices have resulted from the fact that some of these shops had to be set up at short notice and no identity cards were issued because they were not expected to last for a long time. Now that we are recommending the system of fair-price shops or modified ration shops to be maintained as a regular measure for providing relief to vulnerable groups of the population, it is necessary that these shops should be organised on a basis of properly supervised distribution. For each fair-price or modified ration shop there should be a small local Committee of officials and non-officials which should meet at least once a month in the early stages of working of the shops. This Committee should supervise the work of the shop as also the preparation of lists of vulnerable families, distribution of identity cards and "relief quota" cards. The non-officials should be nominated after consulting all the important local interests concerned. Apart from these local Committees there should be a strict inspecting organisation for supervising and exercising vigilance over the work of all these shops.

Cordons. 8.6 If there is an abnormal fall in production on account of natural calamity and larger imports are not available, prices may tend to rise sharply in spite of the measures recommended above. It will be helpful if in such contingencies cordons are put around big cities like Calcutta, Bombay and Madras designed to ban all movements of foodgrains by traders into and out of these cities and their requirement is met entirely from Government stocks or imports. The main justification for cordoning off these big cities will be primarily to insulate the rest of the economy from the pressure that these cities with high purchasing power might exert on the general supply. As we have noticed earlier, some of these cities tend to have a de-stabilising influence on the prices of foodgrains in neighbouring rural areas. The cordoning off of these cities will go some way to relieve distress in these latter areas.

8.7 When, however, cordons are imposed around these cities, care should be taken that fine, medium as well as

coarse grains are available from the ration shops to suit all tastes and all pockets. Higher prices may be charged for the grain preferred by the well-to-do. But such grains should, nevertheless, be available at the ration shops. Otherwise, blackmarketing is likely to get a premium and to upset whatever arrangements may be made for controlling distribution. If all individuals in these cities are provided with identity cards and a large number of modified ration shops is maintained in all these cities as a normal measure it should not be difficult to cordon off these cities at short notice. If, however, the identity cards are not provided as a normal measure and the process of cordoning off and setting up ration shops takes some time, that may give rise to considerable dislocation in the interim period which may have adverse effects not only on the psychology of the people but also on the price situation in general.

8.8 With a view to regulating the distribution of foodgrains in the country, Government have created a number of zones each comprising of two or more States during the last one year. Movement of foodgrains by trade in or out of these zones except under special permit is prohibited. We recognise that these zones by themselves play a useful role especially during the transition period between free trade and physical controls. But, if zones are introduced in a haphazard manner and without proper attention being paid to the effect that they are likely to produce on the consumers outside the zones, there may be considerable dislocation and distress in the initial period. The object of zones is to match deficit areas with surplus areas and thus to minimise the demand on Government supplies and also to eliminate cross-movement of foodgrains. But if the zones are changed too often, that upsets the normal trade pattern and creates considerable difficulties all around. The possibility of obtaining modification of the system of zoning also encourages political pressure. Prior arrangements for adequate supplies for deficit areas outside the zones should invariably be made before any scheme for zoning is implemented. Once a zone is formed it should be maintained on a relatively long-term basis so that the trade patterns are not frequently disturbed. **Zones.**

8.9 At present there are three zones in the country. There is a southern rice zone comprising the four States of Andhra Pradesh, Mysore, Madras and Kerala. There are two wheat zones—one comprising Punjab, Delhi and Himachal Pradesh and the second Rajasthan, Madhya Pradesh and Bombay State. In addition to these, Orissa has been cordoned off for rice and U.P. for wheat. When these zones were first formed they created some dislocation for an initial period and caused distress amongst the vulnerable groups of the population outside the zones. But now that the trade has adjusted itself to these new zones and they are working without difficulty, we do not propose to

change these zones at this stage. After the Foodgrains Stabilisation Organisation has started purchasing and procurement of rice is made as suggested, *e.g.*, in the surplus areas of the southern zone and the Organization itself transfers the surplus to deficit areas the utility of the zone may be somewhat reduced. On the other hand, in the initial stages of working of the Organisation the existence of the zone may be definitely helpful to its operations. The time for removal of the zone will, therefore, be only after some experience of working of the Foodgrains Stabilisation Organisation has demonstrated that the zone is no longer necessary; till then the zone may remain.

8.10 It has been suggested to us that it may be necessary to increase the number of zones to help the working of the Foodgrains Stabilisation Organisation, so that each State should constitute a zone by itself and all inter-State trade should be the monopoly of the Foodgrains Stabilisation Organisation. While we would not rule out further changes in the present system of zoning in the direction of smaller zones we would suggest that the present zones may continue for the time being and modified only after some experience of their working with the proposed Foodgrains Stabilisation Organisation has been gained. One way of getting the same result without increasing the number of zones may be to exercise a greater control over long distance movement of railway wagons carrying foodgrains. In fact, if railway wagons for moving foodgrains between two points in two different States are given largely to the Foodgrains Stabilisation Organisation that would, by itself, go a long way to bring about the desired result. Alternatively, the railways may consider giving higher priority to the Foodgrains Stabilisation Organisation and much lower priority to private trade for the allotment of wagons between any two points as may be indicated by the Ministry of Food & Agriculture from time to time. We understand, however, that if the supply of wagons for foodgrains is to be controlled in this manner it may be necessary to amend the Railway Act suitably. Transport policy will play an increasingly important role in implementing economic policy and requires to be closely integrated with policy regarding distribution and prices of foodgrains. That is why we have recommended earlier that the Ministry of Railways should be represented on the Price Stabilisation Board and it will defeat that recommendation if the Railways Ministry is not given necessary powers for implementing any policy that the Price Stabilisation Board may recommend.

Organisasation for local relief works.

8.11 In view of the large regional disparities of price movements and importance of local price rises, we recommend that a special cell or section should be set up within the State Governments with particularly heavy incidence of scarcity and also at the Centre within the Food Ministry for the purpose of anticipating difficulties arising out of

possible floods and drought, locating scarcity pockets and initiating prompt measures to deal with them. Such organisations are important for preventing scarcity developing into a scare and causing speculative rise in prices in other areas.

Vulnerable areas.

8.12 The chronic distress that obtains in vulnerable areas, *e.g.*, Bihar, eastern U.P., western Madhya Pradesh, eastern and northern districts of West Bengal, Rajasthan, Rayalaseema, tribal areas is not merely due to physical shortage of foodgrains, but also due to lack of purchasing power. Special agricultural, industrial and public works programmes will have to be undertaken in these areas with a view to improving the purchasing power of vulnerable groups. We would, therefore, recommend that the Development Commissioner in each State should be made specially responsible for schemes of development of these areas. The problems of these areas should also receive special attention at the hands of State and Union Governments in such adaptation of the development programmes and projects as might be considered from time to time.

Grain golas.

8.13 In the old days when transport facilities were not properly developed these vulnerable areas alternated between normalcy and famine. But famine came only once in a decade or two when there used to be acute physical shortage due to crop failure followed by large number of starvation deaths. As a result of the development of transport facilities famine in the sense of actual physical shortage of foodgrains is now a thing of the past. Grain is always available in the market but the price is often beyond the means of a large number of people in these areas. On the other hand, because of the development of new urban or industrial areas as in Bihar, the pressure on marketed surplus has increased, resulting in shortage in the lean season in the rural areas. Therefore, instead of the old phenomenon of infrequent severe famine we find now-a-days a situation of frequent scarcity in the lean season. This situation is a natural result of the growth of transport and industries in the country and is incidental to economic development. It partly reflects the deterioration in the relative economic position of that sizable part of the rural population which is composed of landless agricultural labourers. An effective corrective to it can be provided only by programmes which improve the economic condition of this large section of the population. It is also necessary to promote arrangements to conserve more grain in the rural areas for the lean season. We suggest that for this purpose village panchayats and co-operatives should be encouraged, through advances where necessary, to set up grain golas on the lines of those set up in Orissa in recent years where sufficient quantities of grain should be stored for the lean months. Grain golas may provide at least partial assistance in meeting seasonal scarcities in some of the vulnerable areas. It would also

be desirable to liberalise the famine code which was originally drafted to take care of a different type of food shortage to provide now for this new type of seasonal shortage also. We have been told that the funds for scarcity relief at the disposal of the district authorities are very inadequate so far as these vulnerable areas are concerned. We would recommend that provision of more funds for test relief works in these areas should be considered. Besides, the distribution of "relief quota cards" should be more liberal in these areas. We recognise that all these will be at best only temporary palliatives. The more effective and permanent remedy will be setting up of rural industries and improvement of local agriculture by undertaking appropriate development measures.

8.14 As we have explained earlier the various regulatory devices proposed in Chapters VI, VII and VIII need not be imposed all at once. In normal conditions, buffer stock operations supplemented by some imports and selective credit control should suffice. Even then special care will have to be taken of abnormal local rise or fall of prices. Ordinarily, no doubt, the Foodgrains Stabilisation Organisation should be able to take selective action in such areas with a view to correcting such local rises or falls. If, however, the position deteriorates in spite of buffer stock operations, that may have to be supplemented by other measures for short periods, as has been suggested above. But all this should be done on a planned basis according to previously prepared schemes designed to deal with different types of situation. This will obviously require the closest collaboration between different departments of Government and also close liaison with the public. We hope that the Price Stabilisation Board should be able to devise measures to maintain a reasonable relationship between prices of foodgrains and other related commodities and also cost of production, cost of living and incomes. We recognise the complexity of this job in a dynamic situation where the various elements are in a state of flux and have ourselves pointed out the desirability of avoiding rigid adherence to any single formula for the purpose of regulating food prices. We also hope that the Foodgrains Stabilisation Organisation proposed by us will prove to be a flexible but an effective instrument of food policy which will also exercise a healthy corrective influence on cyclical, seasonal, regional as well as sectoral imbalances so far as food prices are concerned. We further hope that the Intelligence Division that we have recommended will be able not only to assess correctly the present situation but also to give advance warning of an incipient crisis by keeping a close watch on the movements of various indicators relating to different regions and different sections. We believe also that the Central Food Advisory Council on which all interests, political, commercial, agricultural etc., will be represented will regularly bring to the notice of Government the views

of the informed public. It will be desirable to set up similar advisory bodies also at the State level.

Permanency of the Food Administration.

8.15 We find that the present food administrations at the Centre and in the States still continue by and large to be temporary. This is probably based on the assumption that the problem of food administration is a passing phase. It is presumably owing to this assumption that some of the suggestions of various Committees for improving the efficiency of the Food Administration, reducing handling costs, improving storage facilities, licensing of trade, etc. have not been fully implemented. There are, however, elements of the food problem which as our assessment will have indicated should be accepted as of a long-term rather than short-term character. A long-term food policy demands a continuing and permanent Food Administration at the Centre and the States. We would, therefore, recommend that the Food Administration should be put on a permanent footing and all consequential action should be initiated to improve its efficiency.

Subsidiary Food.

8.16 An unfortunate result of the feeling that our food problem is purely transitory has been that the attempts which had been made previously for popularising subsidiary food slackened considerably after decontrol in 1954. We cannot emphasize too strongly the importance of taking urgent and effective measures for encouraging the production and consumption of subsidiary food to the maximum extent possible. The Subsidiary Food Production Committee, 1950, had made a number of very useful recommendations. The Food Research Institute in Mysore has also made several very important studies in the matter. We must recognise that our population is increasing fast and requires the maximum efforts to step up the food production potential of the country, including non-cereal foods. One way of getting a more balanced diet than what we are having today would be to get the carbohydrate requirements of our diet from such crops as would require smaller acreage to produce the same calories compared to cereals and use the area thus saved for the production of protein and other essential items for a balanced diet. We would, therefore, recommend that a special division should be set up in the Ministries of Food & Agriculture in the Centre as well as the States to promote the production and consumption of subsidiary foods.

CHAPTER IX

PRODUCTION AND MARKETED SURPLUS

I

Introduction

9.1 We have stated in chapter V that a realistic estimate of additional production during the Second Plan period would be 10·3 million tons or approximately two-thirds of the Plan target and to achieve even this lower figure would require great effort. In saying this, we are not advocating a revision of the target of 15·5 million tons fixed by the Planning Commission. In fact, we believe that if full use is made of all our resources, it may still be possible to reach closer to the Plan target than the above estimate. The prospect of a short-fall from the Plan target has, however, to be faced, unpalatable though its implications may be.

9.2 It has already been pointed out in chapter V that the food problem will stay with us for some time. Food production should, therefore, be a matter of national concern and occupy a high priority in the national endeavour. In arriving at our recommendations, we have relied largely on the data and evidence presented to us.

II

Scheme-wise Analysis of Second Plan Targets

Achievement of targets in the First Plan.

9.3 To appraise the Second Plan targets scheme-wise, it is necessary to look into the targets and achievements under the First Plan. We give the figures below:

Scheme	Achievement as percentage of Physical production targets	Achievement as percentage of Financial expenditure targets
Major Irrigation	47	92
Minor Irrigation	91	63
Land Reclamation and Development	77	75
Fertilizers and Manures	50	59
Improved Seeds	55	56

These figures show that in the achievement of the physical targets, major irrigation was lowest though in terms of expenditure target it was the highest. With minor irrigation the position is the reverse. Thus, in terms of immediate effects on food production, minor irrigation projects have yielded quicker results. As for other schemes, there is not much discrepancy between the percentage of achievement of physical targets and of the

financial targets. While we do not advocate any diminution in the allocation to major irrigation, we recommend that a careful examination should be made of all major irrigation schemes, and, if there is likely to be a short-fall for any reason, from the target of expenditure on them, the funds that may remain unspent should be reallocated to minor irrigation, which promises quicker results. The procedure for such reallocation may be examined and if possible simplified and made more expeditious.

Phasing of the production programme in the Second Plan.

9.4 A detailed examination of the first two years' progress of the schemes under the Second Plan is not possible because the necessary data are not yet available. Only three States presented tentative figures of achievement of 1956-57. These figures show that the targets set for Grow More Food Schemes have been surpassed, for minor irrigation projects fairly achieved and for major irrigation less than half fulfilled. It is difficult, however, to generalise for the whole country from these figures. As regards the phasing of the Second Plan, the targets of additional production for 1956-57 and 1957-58 were fixed at 8·8 per cent. and 16·0 per cent. respectively of the entire Plan targets. Thus during the first two years of the Plan, a little over 24 per cent. of the entire targets have been set for fulfilment, leaving slightly more than three-fourths of the targets for achievement in the last three years of the Plan. The phasing thus follows more or less the same pattern as under the First Plan, and can, therefore, hardly avoid raising the same problems as arose in the later years of the First Plan. We recognize that an even phasing of the targets during the five years may not be entirely feasible and that some bunching of the targets in the last year or two of the Plan is unavoidable. However, the less the crowding in the later years of the Plan, the greater will be the chances of fulfilment of the entire targets. We believe that there is scope for more even distribution of the targets so that the earlier years of the Plan receive their due share.

Scheme-wise estimate of likely achievements.

9.5 We give below what in our view are fair estimates of the achievements that are likely to take place in the Second Plan period.

Schemes	Production targets (million tons)	Achievement as % of production targets	Additional increase in production
Minor Irrigation	1·89	95	1·80
Fertilisers and Manures	3·77	80	3·02
Improved Seeds	3·42	60	2·05
Land Reclamation and Development	0·94	75	0·71
Improved Agricultural Practices	2·47	50	1·24
Major Irrigation	3·02	50	1·51
TOTAL	15·51	66·6	10·33

In making these estimates, we have first borne in mind that the phasing of the Second Plan targets is similar to that of the First Plan targets and the achievements are, therefore, likely to follow the same pattern. Thus the ratios for all the schemes except fertilizers and manures have been estimated at a level only slightly higher than what was realised in the First Plan. The likely achievement ratio for fertilizers and manures has, however, been estimated much higher than in the First Plan because the evidence shows that the demand for fertilisers has already outstripped the supplies provided for in the first two years of the Second Plan. In fact the achievement ratio could have been taken at even more than the 80 per cent. if there had not been the fear that difficulties of foreign exchange might interfere with the fulfilment of the target. There is scope for stepping up effort in respect of the seed schemes. The possibility of obtaining large increases in foodgrains production during the next three years thus seems greatest from the schemes for fertilizers and manures, improved seeds and minor irrigation.

Major and Minor Irrigation.

9.6 As regards irrigation, we may recall that between 1949-50 and 1955-56 double cropping (area sown more than once) in India (excluding Jammu and Kashmir) has increased by approximately 5·4 million acres to 43·4 million acres. The net irrigated area in 1955-56 was 55·5 million acres (out of a total of 318·1 million acres of net area sown). Progress of irrigation by sources since 1949-50 can be judged from the figures given below:

Net Irrigated Area in India

('000 acres)

Source	1949-50	1955-56
Canals		
Government	16,838	19,760
Private	2,347	2,748
TOTAL	19,185	22,508
Tanks	8,480	10,466
Wells	13,679	16,815
Other sources	7,752	5,755
TOTAL	49,096	55,544

The figures show that the increase in the net irrigated area from canals is 3·3 million acres and the increase of irrigation from tanks and wells is 5·1 million acres. This again emphasises the important role that minor irrigation can play in increasing production immediately.

III

Detailed Examination of the Different Schemes

Major Irrigation.

9.7 The major irrigation projects in different parts of the country have created a large potential of irrigation, but not all this potential is being used. At the end of the First Plan the potential created was 5·59 lakh acres in Bihar and 4·65 lakh acres in West Bengal, of which only 2·65 and 2·23 lakh acres respectively were actually irrigated. Thus about 50 per cent. of the potential benefits from major irrigation projects in these two States were not being utilized. Figures for other States tell the same story. We believe, that there are certain inherent problems in major irrigation, that have not been solved and are largely responsible for this state of affairs.

9.8 The most important factor that determines the level of the use of irrigation water is the water rate charged. In many cases the basis for fixing or revising these rates has been arbitrary. Further, the old system of classifying major irrigation projects into the 'productive' and the 'unproductive' categories on the actual return on investment still prevails. But irrigation works have become much more expensive, largely because they are often no longer of the diversionary type but of the multi-purpose storage basin type and have been constructed during periods of high prices. The application of the "cost" principle, therefore, leads to much higher water rates being charged for the new projects. Under these circumstances, there is considerable justification for adopting the principle of "net benefits" for the fixing of rates. Besides, there is need for uniformity of rates in homogeneous tracts. This can be achieved only if the costs of different irrigation projects are pooled together and a uniform rates structure for all irrigation water in homogeneous tracts fixed on the principle of benefits. By this principle a certain proportion of the net benefits accruing to the cultivator as a result of irrigation is charged as water rate, the proportion being fixed after taking into account the needs of economy and flexibility in operation, and of optimum utilization of water.

9.9 In some States where the cultivators are not accustomed to the use of irrigation facilities, they have not shown a ready willingness to use water on payment of charges. It has been suggested that to overcome this initial reluctance to avail of the benefits of irrigation, there should be no assessment charged in the first year or two.

It is expected that after the farmer has become convinced of the utility of irrigation by observing actual improvement in his production, he will be willing to pay the proper rates. We are of the opinion that in areas where full use of irrigation facilities needs to be encouraged, cultivators should be supplied irrigation water at concessional rates during the first few years. The C.D. and N.E.S. blocks in such areas should include as a part of their programme an intensive campaign to teach the cultivators the use and benefits of irrigation.

9.10 In a number of areas where rainfall is usually sufficient, irrigation facilities are in the nature of a security measure to be used only when rainfall is untimely or inadequate. In such cases, the full extent of irrigation available is not utilized. It has been suggested that in these areas a more intensive use of land should be made through the production of two or more crops. For example, unless double cropping is introduced there is little prospect of additional production from the Mayurakshi project and the irrigation system of the D.V.C. in West Bengal. Such changes can be brought about only if sufficient inducement by way of concession or exemption from water charges for the second crop is given to the cultivators during the first few years.

9.11 While in many areas the fertility of the soil is satisfactory and what is lacking is irrigation, there are other areas where the newly irrigated lands do not possess adequate fertility. In these areas, as for example, the command area of the Mayurakshi project, the benefit from water supply is dependent upon greater use of fertilizers and manures. In such areas there is need for an irrigation extension service for promoting proper farm management practices and through them the maximum use of water.

9.12 One reason for the non-utilization of irrigation water during the First Plan was that on some projects though the headworks were completed, the construction of the subsidiary channels was left to the farmers and was considerably delayed. We recommend that the responsibility for the construction of the subsidiary channels should generally be on the Irrigation Department.

9.13 It has also been brought to our notice that in many areas channels have been constructed without taking into account the needs of the locality, so that all the lands that could have received irrigation did not benefit. The lay out and the construction of the distributory system should, therefore, be done after proper consultation with the local people and after taking into account the special needs of each locality.

9.14 One of the major problems that arise in the wake of canal irrigation is water logging for which defective drainage, planning and designing is often responsible. For

example we were told that in the Punjab approximately two million acres of irrigated land have become unsuitable for cultivation. To bring these areas back into cultivation would take many years of intensive and costly effort. The problem of drainage also arises if embankments for flood protection are created without proper surveys. In Assam, for example about five hundred miles of embankment have been constructed during the last few years for the purpose of controlling floods. But they have adversely affected the natural drainage of the areas, and they have also prevented the deposition of the fertile silt that the flood waters from the rivers used to leave on the land. It has been suggested to us that wherever embankments have been or will be put up sluice gates at appropriate points should be provided. Another aspect of drainage that needs to be attended to is that of low lying areas that are inundated by salt water.

9.15 Some of the State Governments have informed us that scarcity of foreign exchange has affected the progress of their major irrigation projects even though the foreign exchange needs of these are not very high, as for example, the Bhadra project in Mysore. Those projects which have already been undertaken and in which the foreign exchange requirements are not very large should be allocated the necessary resources for the completion of the present phase of the construction.

9.16 There are a number of financial and technical problems that arise when canal irrigation is introduced into dry farming areas. Conversion from dry cultivation to wet cultivation particularly in the western parts of the country requires considerable financial outlay by the cultivators on levelling of land, bunding, construction of irrigation ditches and so on. We suggest that the cultivator may be helped with credit and other facilities.

Medium Irrigation.

9.17 The main problems that have arisen in connection with medium irrigation projects relate to the level of water rates, the energising of the tube-wells and their maintenance. We have been told that in many areas the rates are beyond the capacity of the cultivators to pay with the result that full use of water from the tube wells is not being made. At many places, the attempt to work the tube-wells on a no-profit no-loss basis has started a vicious circle. The higher rates have brought down the demand for tube-well water or at least retarded its progress. This has necessitated further increase in rates to make the tube-wells pay their way. It is, therefore, important that ways and means are devised to ensure that irrigation from tube-wells is properly utilised. Our recommendation regarding water rates for major irrigation also hold good for medium irrigation.

9.18 It has been represented to us in certain States that electricity for irrigational purposes was being supplied at

rates higher than were charged for industrial purposes in the same areas. This raises a policy issue regarding the relative importance and needs of power for irrigation *vis-a-vis* industrial use. We suggest that the question be examined.

Minor Irrigation. 9.19 There was a general complaint that while new irrigation works were being completed, the existing works were not being properly maintained, so that the net increase in irrigation is less than the figures of the new construction would show. In some States, it was stated that small irrigation works which had formerly been kept in repair by the zamindars are not now being maintained in proper condition after the abolition of zamindaris. This is a matter which requires immediate attention by the State Governments.

9.20 Since a considerable proportion of the allocations for minor and medium irrigation works will be required for maintaining the existing works, adequate care must be taken to separate the portion that would be needed for new works and that required for maintenance of existing works. This has not always been done. For example, in Andhra Pradesh we were told that an additional allocation of the order of Rs. 5 crores would be needed for bringing back into commission the thousands of tanks that are in need of repair. Unless this repair and maintenance work is properly attended to the net contribution to food production by minor irrigation projects would decrease. It is, therefore, essential that in the remaining years of the Second Plan the allocation for minor irrigation be separated out into two accounts, one for repair and maintenance and the other for new projects. The repair of the existing works should be given as high a priority as construction of new works.

9.21 In Assam large low lying areas in the valley regions offer considerable scope for growing a variety of spring paddy locally known as *boro* paddy, provided irrigation pumps are supplied to the cultivators on reasonable terms. This suggestion should be examined by the State Government.

9.22 In Rajasthan, it was represented to us, that artesian well irrigation had produced good results. Cultivators were given 50 per cent. of the cost of well as loan. Many farmers, however, could not, avail themselves of this because they could not raise the remaining 50 per cent. It was suggested that the amount of Government loan in such cases should be raised to 75 per cent. of the cost. The suggestion should be considered.

9.23 In Jammu and Kashmir, we were told that there were 72 minor irrigation projects and the programme was being phased over three Five Year Plan periods because of lack of adequate technical staff to undertake surveys

etc. The question of providing technical staff to the States for undertaking surveys of water resources should be taken up by the Government of India.

9.24 The basic problem that has remained unsolved is that of making the cultivators conscious of the need and of their responsibility for the maintenance of existing works. The Grow More Food Enquiry Committee (1952) recommended the setting up of co-operatives of growers for this purpose. We are in agreement with this recommendation.

Improved Seeds.

9.25 Twenty two per cent. of the target of additional production of foodgrains is to be achieved through the use of improved seeds. There is likely to be a very large shortfall in achievement of this target unless steps are immediately taken to speed up progress in this direction. The evidence given to us by the State Governments shows that very little progress had so far been made in setting up seed multiplication farms. We stress the urgency for greater progress in this direction particularly since seed schemes require hardly any more funds for a given level of achievement than the other G.M.F. Schemes.

9.26 One of the impediments in the way of a quick progress in the setting up of seed multiplication farms has been the difficulty in acquisition of land for seed farms. These difficulties have been overcome in some States where the procedure for acquisition has been simplified. All States should ensure that the procedure for acquiring land for seed farms is simplified so that delay is avoided.

9.27 In view of the large potential of improved seeds to increase food production, the number of seed stores in each block should be increased to at least four per block so that improved seeds are brought to the door of the cultivator.

9.28 Complaints of delay and adulteration of seed are wide-spread. State Governments should take administrative action to ensure timely supplies of pure seeds.

Chemical Fertilisers.

9.29 A little less than 25 per cent. of the additional production envisaged under the Second Plan is expected to be achieved through fertilizers and manures. The target of consumption of nitrogenous fertilizers under the Second Plan has been placed at 18.6 lakhs tons of sulphate of ammonia in 1960-61. It seems from the present trend of demand that this target is likely to be exceeded. The need for imports of fertilizers will, therefore, be much greater than envisaged under the Second Plan. In the fifteen-month period from January, 1957 to March, 1958 the contracted supply of fertilisers is expected to fall short of the requirements, estimated at 13·4 lakh tons, by about 3.05 lakh tons. In 1958-59, requirements of chemical fertilizers are likely to exceed the indigenous supply by about

9·1 lakh tons in terms of sulphate of ammonia, the import of which will need foreign exchange to the extent of Rs. 27 crores. There is thus a foreign exchange problem involved in the implementation of the fertilizer schemes. It would be worth while here to mention the broad economics of fertilizer use. The Second Plan provides for an additional production of foodgrains of the order of 2·24 million tons from nitrogenous fertilizers. The value of these foodgrains at an average price of Rs. 400 per ton would come to Rs. 89·6 crores in 1960-61. Over 5 years, the value of additional foodgrains produced with the application of fertilisers would come to about Rs. 268·8 crores whereas foreign exchange outlay for the entire import programme (including the demand for commercial crops) would work out to about Rs. 101·3 crores. The cost of fertilisers is thus less than half of the value of the additional foodgrains that the fertilisers would produce. On balance, therefore, import of fertilisers would appear to be definitely advantageous.

9.30 From the estimates furnished to us by the Ministry of Food & Agriculture, it appears that the demand of fertilisers is running ahead of the Plan targets. The requirements for 1957-58 and 1958-59 are estimated at 13·4 and 14·5 lakh tons respectively in terms of sulphate of ammonia against the Second Plan targets of 9·5 and 12 lakh tons for the same years. The availability from the indigenous sources is still far below the Plan targets. For example, for 1958-59, the total domestic availability is of the order of 5·4 lakh tons against the target requirements of 12 lakh tons. If the present foreign exchange position does not permit imports of fertilisers to the extent necessary even to meet the Plan targets, not to speak of the actual requirements, then the set back to the increase in foodgrains production would be serious.

9.31 We consider fertilizers to be of fundamental importance also because of the important role they play in extension work. Fertilizers break the resistance of the cultivators to new improved farming techniques. Cultivators should also be induced to use more of fertilisers like oil cakes fish manure, bone-meal and super phosphates, supply of which is not as deficient as that of nitrogenous fertilizers.

9.32 We recommend the setting up of more factories for producing chemical fertilizers in India. One way to meet the foreign exchange requirement that would arise in this connection would be either to invite foreign firms to participate with Government or with private enterprise in setting up these factories or even to give them scope to set up factories on their own. In view of its importance as a producer of rice and consumer of fertilizers, Andhra Pradesh would be suitable for location of one such plant.

9.33 As regards manures, we emphasise the urgent need to develop local manurial resources, e.g., night soil, farm yard manure, compost, green manure.

Forests.

9.34 Intimately connected with the production of food is the question of forests. In India, forests account for 22 per cent. of the total surface, but a large part of this forest is forest only in name, and it is very unevenly distributed. The enormous disparity in the forest area in different parts of the country will appear from Table 9 in Appendix VI. The National Forest Policy Resolution of 1952 proposed that the area under forests should be raised steadily to 33 per cent. of the total area, the proportion to be aimed at being 60 per cent. in the hilly region and 20 per cent. in the plains. Very little has been done to implement this resolution. The low percentage of forests in the plains has many harmful effects on agricultural production as has been repeatedly stressed. We recommend that the National Forest Policy Resolution should be implemented as soon as possible, particularly as regards its provision that the wooded area in the plains should be raised to 20 per cent.

Competition between Forestry and Agriculture

9.35 It should be recognised that there may in some places be a certain degree of conflict between increasing forest area and what is called 'reclaiming waste land'. Such waste land is often area officially classified as forest—in other words—area that was formerly wooded but has now been depleted of trees. Such waste land must be reforested, and not be permitted to be brought under the plough as it is very often of poor quality for agricultural purposes. The overall conflict between the claims of forests and any attempt to increase the cultivated area appears from the following figures:

Land utilisation in India

	(Million acres)
Geographical area	811
Classified area	722
Forests	133
Not available for Cultivation	122
Uncultivated land	95
Cultivated land including fallows	372
	722

If the forests are to be increased to 33 per cent. of the classified area, the forest area must be increased from 133 million acres to 241 million acres, an increase of 108 million acres. But the uncultivated land is only 95 million acres, and, besides, there is the claim to bring more land under the plough. This argument must, however, be taken together with the detailed figures given in appendix giving

the distribution of the forest land in different parts of the country. While in certain States there may be scope for reclaiming land from the forest, in other areas, it will be necessary to increase the wooded areas. In fact, there is reason to think that some of the land now classified and used as agricultural land could be more profitably turned into forest. This is where the land is of poorer quality, which hardly repays the cost of cultivation but which would become an economic asset if turned into a wooded area. A careful examination of land utilization from this point of view is, therefore, an urgent necessity.

Land Reclamation. 9.36 Subject to what we have stated in the two preceding paragraphs there is considerable scope for land reclamation in some areas. During the First Plan period the work of reclamation was carried on vigorously. We are told that during the last two years, there has been considerable slackening of this effort. It seems that if the present pace of reclamation and development work is not stepped up, much less than 75 per cent. of the Plan target would be achieved. In Rajasthan, it seems, that a substantial increase in production can be brought about through conservation of rain water by permitting it to percolate in the soil by bunding with sand. This method, we understand, has large potentialities.

9.37 Progress of soil conservation in many States such as U.P., Bihar, West Bengal, Andhra Pradesh, Mysore and Madhya Pradesh seems to have been very slow. In fact, it seems that none of these States have been able to come even close to the targets laid down. In view of the fact that soil conservation measures would often result in an increase in food production particularly in regions of dry farming, we would emphasise the need to step up the progress of soil conservation work in these States. Since one of the difficulties in this direction is the lack of trained personnel, we would recommend to the Government of India to increase the facilities for training in soil conservation methods.

9.38 Some other points that were brought to our notice related to (a) difficulties experienced by mechanised farms in obtaining adequate and reasonably-priced spare parts; (b) indiscriminate imports of tractors of unknown makes and without adequate facilities for training and servicing; and (c) lack of follow-up cultivation of reclaimed land. Solution of the first two difficulties has to be sought through restricting the licensing of imports of tractors and mechanical equipment only to such firms as would guarantee training and servicing facilities. Such a decision has already been taken by the Government of India and we recommend that it be enforced strictly. Regarding (c) we suggest that necessary administrative steps may be taken by the State Governments for transfer of reclaimed lands to cultivators immediately after reclama-

tion so that no delay takes place in follow-up cultivation. The question of reducing the cost of diesel and lubricating oils also deserves to be looked into.

Community Development and National Extension Service.

9.39 Much hope is pinned on the CD and NES areas for stepping up the production of foodgrains during the Second Plan. A sample survey conducted by the National Sample Survey Organisation on Rabi crops in 1954-55 revealed that for wheat, barley and gram, in the sample blocks considered, the yield rates from the Community Development areas exceeded the general yield rates to the tune of about 25 per cent. It should not be forgotten that the proportion of irrigated area and the distribution of fertilisers in the CD and NES blocks was relatively large. It was pointed out to us that if the effects of these two factors were eliminated, it was doubtful whether the yield rates in CD and NES areas were really larger. However, we have no doubt that as the extension service gets more firmly rooted and production-oriented, substantial increase in production can be brought about by better trained and organised staff. In the opinion of many witnesses it was being too optimistic to expect an increase of 50 per cent. in the food production in irrigated areas and 30 per cent. in dry areas until production orientation had attained the desired level. We are inclined to agree with this view.

9.40 We learn that the Ministry of Community Development has recently re-oriented its programme and policy so that food production received a high priority. We emphasize that these decisions be implemented effectively and quickly. The most far-reaching suggestion extended to us all over the country was that the control and guidance of agricultural programmes in NES and CD areas should be transferred from the non-technical hands of the NES staff to the technical hands of the State Agricultural Departments. The unduly large jurisdiction of the village level worker was also pointed out to us as a drawback. We do not consider it necessary to go into the subject of CD and NES areas in any great detail. A pointed reference to the administrative difficulties of these areas has been made by the CD and NES Areas Team under the leadership of Shri Balwant Rai Mehta. We understand that recommendations of this Team for the decentralisation of administration at the block level through the formation of statutory block boards on a democratic basis are receiving careful consideration.

Agricultural bias to education.

9.41 From the production point of view, the most valuable contribution that the Community Development movement can render is in making the cultivator more receptive to improved methods of cultivation. However, we feel that this should be supplemented to a much larger degree than is being done, by giving an agricultural bias to education in rural areas, particularly at the secondary

education stage. We would draw attention to the recommendations of the Secondary Education Commission which has stressed the necessity of providing much greater opportunities for agricultural education. The All India Council for Secondary Education has framed a syllabus for Agricultural High Schools. But we regret that no great progress has been made in introducing this syllabus into rural schools. The figures for 1954-55, which are the latest available, show that there were only 44 agricultural schools in the entire country with 3,086 pupils. Of these 17 were in the State of Bombay, and 27 in the rest of the country. This may be compared with the 27,518 ordinary secondary schools and the 44,59,752 pupils on the rolls. It is thus clear that agricultural education has much leeway to make up. We recommend that the aim should be that every Tehsil should have at least one agricultural high school, and that as far as possible all ordinary secondary schools in rural areas should adopt the syllabus for agricultural bias prepared by the All India Council for Secondary Education.

9.42 The state of higher education in agriculture is no better. There were in the entire country only 18 Agricultural Colleges in 1954-55. These colleges had 4,827 pupils to meet the growing demand for trained personnel. The number of agricultural colleges requires to be greatly increased.

Land Reforms.

9.43 In almost every State we were told that uncertainty about land reforms was affecting productive effort. The announcement of intention to institute land reforms without setting up the proper machinery for implementation has deterred the big land-holders from investing in the improvement of land. At the same time, this hesitancy of the big land-holders is not compensated by greater interest on the part of the tenants, because unless the tenants actually benefit from the implementation of the reform measures, they do not have either the will or the means to invest more in land. The development of land resources is, therefore, suffering. In our opinion, the State Governments should proceed expeditiously with enacting the necessary legislation for land reforms and, what is more important, following it up with effective implementation. This should indeed contribute to the growth of agricultural production in the country.

9.44 Apart from the broad effect on production, there are certain specific ways in which the present situation is hampering production. For instance, there are States where laws against eviction have been passed but reforms relating to ceilings and limits on future acquisition have not been pushed through. In these areas, big landholders do not give lands to the tenants for fear that they would not get them back. Nor is the land-holder able to cultivate his entire holding by himself.

9.45 No land reforms can be successful unless they are backed up with a strong machinery for enforcement. We have not yet evolved this machinery with the result that in various parts of the country ejectment of tenants and fictitious revenue entries are still going on as pointed out by the representatives of several groups to the Committee. What is needed, therefore, is a stronger decentralized administrative effort in the rural areas, with adequate non-official co-operation to follow up the land reforms legislation with proper enforcement.

9.46 Delays in the process of consolidation of holding has an inhibiting effect on production. While the ultimate benefits of consolidation of holdings on increased food production cannot be denied, any delay in the process of implementation of consolidation schemes makes small holders disinterested in cultivating and improving their holdings, which they feel may not remain with them. Consolidation operations should, therefore, always be carried out with as much speed as possible.

9.47 The importance of devoting greater attention to the improvement in design and manufacture of indigenous farm implements, irrigation and transport devices, was also brought to our notice. It was claimed that simple, cheap and easy to repair, hand and bullock-driven devices fall more readily into the pattern of our country's rural economy than imported machinery. At this stage of the country's development we agree with this point of view.

Useless and stray cattle.

9.48 The problem of cattle in India seems to have remained as baffling as it was before. The number of useless, stray and un-cared-for cattle is alarmingly on the increase. The total population of useless and un-productive cattle in India is estimated to be 16 millions. This large cattle population undoubtedly makes serious inroads into the agricultural output of the country. Besides, it also accelerates the problem of soil erosion. In fact, in many parts of the country there is already a serious competition between man and cattle for subsistence from land. We feel that the seriousness of this menace should be recognised by the Government and steps taken by them for effectively decreasing the number of such cattle.

Administrative and financial problems.

9.49 Some of the administrative difficulties that have been hampering the progress of development schemes have already been mentioned in the earlier paragraphs. The more important and general of these will be dealt with here. The present practice of re-reference of development and G.M.F. schemes for final administrative and financial sanction is dilatory. At present final sanction of these schemes is sought after the passage of the budget in the State Legislatures. This means that the money for the schemes does not in many cases start flowing until towards the end of the

financial year. The result is quite often confusion, injudicious expenditure, and either a sacrifice of quality for quantity, or a partial or total lapse of the sums allotted. There is urgent need, therefore, for modification in the present administrative and financial procedures of the Union and State Governments. What is needed is synchronising the procedure for executive approval and financial sanction of schemes to suit the developmental needs.

9.50 In most States, there are large arrears of G.M.F. loans which have not yet been recovered by the State Governments. This tendency of permitting arrears to pile up puts a heavy strain on the resources of the nation and should, therefore, be checked.

9.51 We found that in most States large sections of the subordinate staff of the Agriculture and other Development departments are comparatively low paid and kept temporary for a long time. This state of affairs cannot but lead to low efficiency. We suggest that the State Governments may examine these questions.

IV

Marketable Surplus

9.52 In Chapter IV, we have mentioned the problem of marketable and marketed surplus. The food needs of the urban areas are expected to increase considerably in the course of the next few years and, as the tempo of development and urbanisation increases, the flow of surplus from the rural areas is likely to become uncertain. It is imperative that necessary measures be taken, in the first place, to augment the total marketable surplus and, in the second place, to encourage its flow to the assembling markets. It will also be necessary to collect all data relevant to the study of market behaviour on a regular basis from different parts of the country.

Measures for augmenting marketable surplus.

9.53 For augmenting marketable surplus, facilities need to be provided in the rural areas such that while the cultivator is encouraged to part with his grain after the harvest, he would not be left high and dry in the subsequent lean part of the year. For this purpose, we suggest the setting up of grain golas in the rural areas as is being done in Orissa. The grain golas are being set up in that State on co-operative basis. The emphasis in the formation of co-operative grain gola societies is on local grain collections by way of share and deposit; Government also deposits paddy with these societies. Paddy comes into the golas in three ways: firstly, in repayment of the paddy loans; secondly, in the discharge of fertiliser loans; and, thirdly, in pursuance of the marketing operations of members through the grain gola society. Grain golas thus help the collection of marketable surplus in the rural areas and,

by providing local storages to meet the local needs, facilitate marketing of the surplus to other areas.

9.54 Another way of augmenting marketable surplus in the rural areas would be to link the supply of credit by the co-operative societies with the marketing of produce. We recommend that this may be tried out in the districts with large surplus of foodgrains in the country. We also recommend that in the Community Project areas special efforts may be made to make the farmer market-conscious, encourage him to sell more of his produce in exchange for industrial goods and thereby ensure that increased production in these areas is reflected in the marketable surplus.

Encouraging the flow of marketable surplus.

9.55 For encouraging the flow of the surplus from the rural areas to the assembling markets, it seems necessary that the markets should be regulated. Besides grading and standardisation, the regulated markets promote fair market practices and save the cultivator-sellers from the arbitrary deductions and other malpractices. Wherever markets have been regulated, the experience has been that the farmer has felt encouraged to take his grain to them in preference to the unregulated markets. Several Committees have in the past emphasised the need for statutory regulation of markets; but, so far, out of a few thousand markets in the country, only 521 are regulated and of these about 300 are regulated for foodgrains. These markets exist in six States, their distribution being as under:

Regulated Markets in India

State	Total number of regulated markets	Number of markets regulated for foodgrains
Andhra Pradesh . .	79	33
Bombay . . .	184	103
Madhya Pradesh . .	74	23
Madras . . .	19	..
Mysore . . .	50	31
Punjab	115	108
TOTAL .	521	298

In other States regulated markets do not exist. In some of them, however, the necessary legislation is being enacted but in a few it has yet to be initiated. We would recommend the setting up of regulated markets in all parts of the country, preferably on the model of the markets of the

erstwhile Hyderabad State, and would urge the State Governments to take necessary steps in the matter.

Market studies. 9.56 Regular studies of the pace and volume of marketable surplus in relation to fluctuations in production and prices are essential for the formulation and review of policies relating to price stabilisation. For this purpose, arrangements should be made for the collection of all relevant data including the information on market sentiment and expectations which affect the course of prices considerably. In fact, it is on the basis of a regular study of the market behaviour that the Intelligence Division, the setting up of which we have recommended, will provide the necessary guidance to the Price Stabilisation Board and Government.

Research. 9.57 The need for technical, economic, and social research can hardly be over-emphasised. In fact a number of the recommendations in this report have been for eliciting more facts and figures in areas where the available knowledge is rather inadequate. It has cropped up in our studies of demand, supply, production responses, marketings, marketed surplus and farm management, to list only a few. While a lot of work is being done at present by the Government departments, Universities and other Research centres, we feel that a lot still remains to be done and Government should allot more funds for research to the various bodies concerned. The role of research in the development of the country cannot be over-emphasised.

CHAPTER X

PROBLEM OF SCARCITY AREAS

I

General

Introduction. 10.1 There are aspects of the problem of an adequate and equitable supply of foodgrains which do not become evident in a consideration of an overall balance between the supply of and the demand for foodgrains. They concern certain regions and certain sections of the population and require an intensive examination.

Neighbourhood of big cities. 10.2 For instance, the neighbourhood of metropolitan areas and other big cities often suffer considerably, as we have mentioned in chapter IV, because of the heavy pressure on supplies emanating from big cities. The influence of Calcutta is known to reach out to Orissa and the eastern districts of Bihar. Nearly 25 million people at present live in cities with populations more than one lakh and their demand for foodgrains often causes some disturbance to the supplies of foodgrains in the neighbouring rural areas.

Agricultural labour. 10.3 Again, agricultural labour population is found in quite large proportions in Orissa, Bihar, certain parts of Madhya Pradesh and in most of the South. In these parts, agricultural labour forms over 40 per cent. of the total rural population. They form the poorest sections of our rural society. A comparison of the data on consumer expenditure found in the Agricultural Labour Enquiry Reports and the consumer expenditure data from the Second and Third Rounds of investigations of the National Sample Survey conducted in 1951 (unpublished) shows that among the rural population agricultural labour has the lowest levels of consumer expenditure. Nearly half of these labour families have no lands to cultivate and others have only very small holdings. A majority of them have to buy a large part of their foodgrains from the market. They are, therefore, exposed to the hazards of a rise in prices of foodgrains.

Distress areas. 10.4 Besides, there are areas like those of western India and the Deccan Plateau which have scanty rainfall and are exposed to drought and failure of rains. There are also the tribal areas where people depend overwhelmingly on primitive agriculture and failure of crops entails acute distress; and areas like eastern U.P. and north Bihar with dense population depending mainly on paddy crop which is frequently affected by floods or drought.

Need for intensive survey.

10.5 All these distress areas have posed difficult and recurring problems. These are spread over a long belt extending from the northern districts of Bombay to the eastern tip of Assam and touching parts of Rajasthan, Madhya Pradesh, Orissa, eastern Uttar Pradesh, Bihar and West Bengal. In almost all these areas, the purchasing power of the people is generally low owing to inadequate employment opportunities and unbalanced economy. There are certain other factors, peculiar to different areas, which heighten the gravity and complexity of the problem. While in many areas the prime factor is the frequency of climatic misfortunes, in other areas the basic weakness appears to be lack of communication facilities, high density of population, small size of holdings or the general backwardness of agriculture. The remedial measures for each of these areas would, therefore, depend on the nature and intensity of its problem. The various measures that we have recommended in the earlier chapters should reduce the intensity of some of the specific problems mentioned above. But these areas also merit intensive studies for assessing the local factors, economic as well as social, and deciding upon the correct solution. Such studies are all the more important inasmuch as these areas are not only problem areas *per se*, but as we have explained earlier they also tend to upset the balance of the overall food situation. Within the short time at our disposal, we have not been able to attempt such intensive studies. Besides, the terms of our reference required us to make a study of the overall food position in the country and to make recommendations in an all-India perspective. We hope, however, that detailed and intensive studies would be undertaken in these areas before long. Nevertheless, we have made a brief study of the local problems of one of these pockets, *viz.*, the eastern districts of Uttar Pradesh, which is given in the next section. We would, however, like to make it clear that this is by no means an exhaustive or elaborate field study. It is based on such information as was available to us from published sources and evidence tendered by official and non-official witnesses.

II

Eastern Uttar Pradesh

Area covered by eastern districts.

10.6 What are called eastern districts of Uttar Pradesh do not represent any well-defined area. There is no natural demarcation line to denote the tract covered by the eastern districts. From the view point of food scarcity, the districts to be included have to be such as are chronically deficit and form a compact block of territory. The two eastern-most and highly deficit Divisions of Varanasi and Gorakhpur have essentially to be a part of the eastern districts, with the exception of Mirzapur District which consists

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of a thinly populated plateau. Contiguous with these two Divisions are the 6 districts of Faizabad Division including Pratapgarh, Sultanpur, Faizabad, Barabanki, Gonda and Bahraich. These districts are also subject to the same type of difficulties as are the areas covered by Varanasi and Gorakhpur Divisions. The three Divisions form an unbroken stretch of territory with common characteristics bearing on food situation. The U.P. Census Report, 1951, also includes 4 out of 6 districts of Faizabad Division in the scarcity area of eastern U.P. Volume II, part I-A of that Report says, "the whole of Gorakhpur Division, Banaras Division except Mirzapur, Faizabad Division except Gonda and Bahraich and Lucknow and Rai Bareili districts of Lucknow Division are danger spots from the point of view of rural food situation." Gonda and Bahraich which were left out, have been in a relatively better position partly because they have been receiving considerable quantities of rice and paddy from Nepal. With the imposition of a ban on exports from Nepal, these two districts may now have to face scarcity in times of floods which are quite frequent there. Considering all this, we are of the opinion that the scarcity area in the eastern districts of U.P. should include the three Divisions of Gorakhpur, Varanasi (except Mirzapur District) and Faizabad comprising the following districts:

Gorakhpur Division .	Gorakhpur, Deoria, Basti, Azamgarh.
Varanasi Division .	Varanasi, Jaunpur, Ghazipur, Ballia.
Faizabad Division . .	Pratapgarh, Sultanpur, Faizabad, Gonda, Bahraich, Barabanki.

In the discussion that follows, it is the 14 districts of these three Divisions that are compendiously described as eastern districts or the eastern region.

Density of population and *per capita* cultivated area.

10.7 These eastern districts are among the most thickly populated parts of the country. Next to Kerala and the West Bengal plains, the density of population is the highest there. North Bihar is more or less at the same level. In these districts, the density is 833 per sq. mile as compared with 468 for the rest of U.P., 557 for U.P. as a whole and 281 for all-India. For the two Divisions of Gorakhpur and Varanasi, except Mirzapur, the density is even higher and works out to 942. Among individual districts of the region, the highest density is in Ballia where it exceeds one thousand. This exceptionally heavy pressure of population on land is the root cause of the food problem in these districts. While the present position is bad enough, more disturbing are the future possibilities as indicated by past trends. In the past, there has been a large decline in the cultivated area

per head of population as will be evident from the figures given below:—

Cultivated Area per capita

(Inclusive of city population)

(In cents of acre)

District	1921	1941	1951
Gorakhpur-*cum*-Deoria	73·7	54·8	50·1
Basti	66·5	60·3	56·7
Azamgarh	58·3	52·4	48·0
Varanasi	52·9	43·8	38·4
Jaunpur	55·5	48·1	45·9
Ghazipur	73·2	60·6	53·6
Ballia	63·9	53·0	47·7
Pratapgarh	60·0	50·7	49·7
Sultanpur	63·2	58·6	52·2
Faizabad	59·5	53·5	48·7
Gonda	78·9	..	64·3
Bahraich	91·5	..	74·9
Barabanki	71·0	60·4	56·4

Likelihood of further decline of *per capita* cultivated area.

10.8 For the future, while the growth of population is showing no signs of abatement, the scope for extension of cultivation is being exhausted. In all these districts, cultivation has already been stretched to more or less the saturation point. The proportion of net area sown to total area available for cultivation (including culturable waste and fallows), is very high which shows that there is little scope for bringing more land under the plough and that future increase in population is likely to result in a further decline in the *per capita* cultivated area. The following data on land utilization pertaining to these districts for the year 1955-56 will make the position clear:

Table showing Land Utilisation Statistics

(for 1955-56)

(In thousand acres)

District	Area	Cultivable area	Gross area sown	Net area sown	Net area sown as percentage of cultivable area
Varanasi	1,305	915	1,047	811	89
Jaunpur	995	845	872	708	84
Ghazipur	833	722	7,759	642	89
Ballia	795	643	764	590	92
Gorakhpur	1,604	1,260	1,608	1,171	93
Deoria	1,344	1,169	1,433	1,075	92
Basti	1,811	1,182	1,932	1,427	91
Azamgarh	1,419	1,182	1,327	1,062	90
Pratapgarh	917	665	658	550	83
Sultanpur	1,107	827	884	695	84
Faizabad	1,084	828	1,002	741	89
Gonda	1,882	1,451	1,840	1,286	89
Bahraich	1,713	1,273	1,495	1,100	86
Barabanki	1,129	874	1,010	722	83

10.9 The effect of high pressure of population and low *per capita* availability of land per head of population would have been mitigated if the yield per acre were good. In States like West Bengal, where too there is high concentration of population, the position in a normal year is not so bad because the yield per acre is fairly high. But in the eastern districts of U.P. excessive population and low yield co-exist to make these districts chronically deficit. Average yield per acre for the quinquennium ending 1955-56 for important cereals produced in these districts is given below: **Yield per acre.**

Average yield per acre for the quinquennium ending 1955-56

(In Lbs.)

District	Wheat	Rice	Barley
Gorakhpur	681	533	554
Deoria	671	439	615
Basti	681	507	467
Azamgarh	783	374	937
Varanasi	679	456	881
Jaunpur	697	413	965
Ghazipur	678	361	953
Ballia	678	441	862
Pratapgarh	809	530	884
Sultanpur	809	479	713
Faizabad	809	493	713
Gonda	597	481	713
Bahraich	519	386	713
Barabanki	839	581	713
U. P. State . . .	891	572	933

10.10 As a combined effect of over-population and low productivity of land, *per capita* output of cereals in these districts is low. For the years 1950-51 and 1955-56, the average output *per capita* works out as under: **Output per acre.**

Per capita Annual Output

(In maunds)

	1950-51	1955-56
Eastern Districts	3·33	3·24
Rest of U. P.	4·84	4·55
All U. P.	4.22	4·07

Floods and drought cause wide variations in annual output.

10.11 When the average availability of cereals from local output is already very low, the situation in any particular year of poor crop as a result of bad weather conditions can easily turn into one of scarcity. These districts constitute an area where floods and drought have been more or less annual phenomena during the past few years. Rivers Gandak, Rapti, Ghagra, Gomti and Ganga and a number of streams like Rohin, Kuano, Anni and Sai flow through them and cause floods in one part or the other almost every year. The area is subject to drought quite often. The average rainfall in these districts is about 43 inches but fluctuates considerably from year to year. Rainfall is also not evenly distributed during the year. There are often unduly long breaks in rainfall creating drought conditions and affecting crops. Since the intensity of floods and drought varies from year to year, there is wide variation in the annual output of foodgrains. The following data show the highest and lowest output of cereals and variation from the mean output for the period 1949 to 1955-56:

Extent of Annual Variation in Output of Cereals for 14 Districts during the period 1950-51 *to* 1955-56

(In thousand tons)

Commodity	Highest output	Lowest output	Difference between (2) and (3)	Mean output	(4) as percentage of (5)
(1)	(2)	(3)	(4)	(5)	(6)
Rice . . .	1,239	695	544	1,003	54·24
Wheat . .	692	473	219	590	37·12
Maize . .	358	54	304	248	122·58

Successive calamities since 1954.

10.12 What has made the situation in 1957 acute is the heavy damage caused to crops by the floods in 1956, which came on top of successive natural calamities in the preceding two or three years. The floods in 1954 were serious enough. They were followed by heavier floods in 1955 and then by hail-storm in the same year. The floods of 1956 might not have been as extensive as those of 1955, but were certainly of greater intensity. There was wide-spread damage to the kharif crops of the 1956-57 season. Over-flooding, westerly winds, hail-storms and rust damaged the rabi harvest. The autumn of 1957 has experienced drought which has aggravated the situation.

Need to increase yield and acreage under double cropping.

10.13 The problem of the area is that it has a large deficit even when crops are normal. That is why damage in a particular year impinges heavily on the incomes of the people and the availability of food in that area. The basic solution to the problem lies in reducing the normal deficit

by greater effort in production. There being little scope for extension of cultivation, the only way out is to concentrate on increasing the yield per acre and the area under double cropping.

10.14 One reason generally mentioned for low yield is that the pressure of population has forced even sub-marginal lands to be brought under the plough. As already shown, the extent of land utilization in these districts is very high. Although as between individual districts there is no clear correlation of average yield per acre with the extent of land utilisation, it is obvious that a considerable area of sub-marginal land with poor yield has been brought under cultivation. **Reasons for low yields: sub-marginal cultivation.**

10.15 The high percentage of petty holdings is another feature of these districts which accounts for the low yield. Over-fragmentation is due to high density of population. The decline in village industries has also resulted in a larger proportion of population depending on agriculture. The percentage of population dependent on agriculture in these districts rose sharply during the period between 1901 and 1951 as will be clear from the table given below: **Over-fragmentation.**

Percentage of population dependent on agriculture

District	1901	1951
Gorakhpur	62·3 (1921)	85·7
Deoria	71·6	93·5
Basti	64·7	90·7
Azamgarh	59·4	83·3
Varanasi	56·1	58·4
Jaunpur	81·3 (1911)	80·7
Ghazipur	70·5	78·0
Ballia	66·3	73·7
Pratapgarh	76·2	86·6
Sultanpur	74·1	88·5
Faizabad	63·6	84·4
Gonda	63·4	86·3
Bahraich	..	89·3
Barabanki	72·2	82·2

Source: U.P. District Census Reports.

No recent data on land holdings in these districts is available. A fairly good idea of the extent of fragmentation and sub-division of land holdings in these districts can be had from the figures given in the U.P. Zamindari Abolition Committee Report, 1948, Vol. II which contains data for 47 districts of U.P., that is to say, the entire State excluding the States of Tehri-Garhwal, Rampur and Banaras and the hilly portions of the Kumaon Division consisting of the districts of Nainital, Almora and Garhwal.

The following data have been based on the information contained in that Report:

Area covered by holdings of different sizes

(In thousand acres)

	Not exceeding 2 acres	Exceeding 2 acres but not exceeding 5 acres	Exceeding 5 acres	All holdings in the zone concerned
14 districts	25,21	35,31	62,28	1,22,80
Rest of U. P.	33,22	8,07	2,49,07	2,90,36
All U. P.	58,43	43,38	3,11,35	4,13,16

Thus, in the eastern districts holdings below 2 acres account for 20 per cent. of the area under all holdings; the corresponding figure for the rest of U.P. is only 11 per cent. Similarly, the proportion of area covered by holdings exceeding 2 acres but not exceeding 5 acres to the area under all holdings is about 29 per cent. in 14 districts and only 3 per cent. in the rest of U.P. On the other hand, the proportion of area covered by holdings exceeding 5 acres is much greater in the rest of U.P. than in the 14 districts. It is about 86 per cent. in the rest of U.P. and in the 14 districts about 50 per cent. All this shows that there is greater concentration of small holdings in eastern districts. What is required is a drive for promotion of cooperative servicing and better farming societies, so as to overcome the difficulties of tiny holdings.

Irrigation. 10.16 As for irrigation, the percentage of irrigated area to total cultivated area in the three Divisions is given below:

Percentage of irrigated area to total cultivated area

(In thousand acres)

Division	Net area sown	Net area irrigated	Percentage of Col. (3) to (2)	Gross area sown	Gross area irrigated	Percentage of column (6) to (5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Varanasi*	2,752	1,184	43·0	3,443	1,226	35·6
Gorakhpur	4,735	2,117	44·7	6,300	2,157	34·2
Faizabad	5,094	1,497	29·4	6,889	1,553	22·5
Rest of U. P.	29,089	7,438	25·6	35,317	8,582	24·3
All U. P.	41,670	12,236	29·4	51,949	13,518	26·0

*Excluding Mirzapur district.

The percentage of irrigated area to cultivated area in these districts is considerably larger than for the State as a whole. But it must be pointed out that the larger part of the irrigation is accounted for by masonry wells and other minor irrigation works. State works play a less important role in these districts than in the State as a whole. As the following table shows, canal irrigation accounts for 4·83 per cent. of the net irrigated area in these districts and 54·5 per cent. in the rest of U.P.:

Irrigation by different sources

(In thousand acres)

	Net Irrigated area	Irrigation by canals	Irrigation by wells	Irrigation by tanks and other sources	Canal Irrigation as % of net irrigated area
Gorakhpur Division	2,117	7	1,241	869	0·30
Varanasi Division (excl. Mirzapur)	1,183	62	1,020	101	5·27
Faizabad Division	1,497	163	822	512	10·90
Total 3 Divisions (excl. Mirzapur)	4,797	232	3,083	1,482	4·83
Rest of U. P.	7,439	4,059	2,852	528	54·5
Total U. P.	12,236	4,291	5,935	2,010	35·0

While many new irrigation works have been undertaken under the two Plans, it has been brought to our notice that the number of wells available for irrigation has been going down and adequate attention is not paid to keeping the old wells in good repair. The decline in the number of wells seems to be partly due to their replacement by canals and tube-wells and partly to lack of repair. Wells have a part to play even in the areas receiving canal water, because the grower can draw upon well water at any moment he likes. In other areas, adequate stress on the construction of masonry wells and repair of old ones seems to be necessary to bring a larger area under irrigation. The water level in these districts being high, masonry wells provide cheap and ready means of irrigation.

Poor progress of flood control schemes.

10.17 Another factor responsible for low average yields in these districts is the damage caused by frequent floods. Flood control measures will raise the yield. What is desirable and possible is to reduce the intensity of floods, because to some extent these floods are beneficial. The State Government constituted a Flood Control Board in 1954 for coordinating all measures relating to control of

floods. Under the First Plan, schemes estimated to cost Rs. 9·68 crores were started. Out of this amount, a sum of Rs. 5·41 crores was spent up to the end of 1956-57. Under the Second Plan schemes estimated to cost Rs. 8·29 crores were started, out of which only Rs. 48 lakhs have been spent by the end of 1956-57. This pace is obviously poor and needs to be stepped up.

Fertilizers and manures.

10.18 We were told that the State Government is considering a proposal to give subsidy on the distribution of chemical fertilizers to these districts. That should help in raising the yield. But because of prevailing difficulties about chemical fertilizers, provision of organic manures and green manuring are urgently called for.

Short-term crops.

10.19 In order to increase the production of foodgrains in these districts, the State Government is exploring the possibility of introducing short-term crops which can mature between the harvest of the rabi crop and the beginning of the rains.

Need to check the growth of population.

10.20 Considering the extent of food deficit in these districts, it is clear that after everything possible has been done to augment food production, the problem of deficit will continue to remain unless steps are simultaneously taken to check the growth of population.

Income and purchasing power of the people.

10.21 Ever since the beginning of War-time controls, Government has had to assume responsibility for distribution of foodgrains in these areas in one form or the other almost continuously except for the year 1954-55. There are two different problems facing the people of the area: one is of physical supplies and the other is of purchasing power. When crops in these districts are normal, the problem of purchasing power is not pressing. The Report on Agricultural Labour Enquiry 1951, gives the following comparative figures of incomes and expenditure:

Annual income and expenditure of agricultural labour families in U.P.

Zone	Size of family	Average earning strength	Income per family Rs.	Consumption expenditure per family Rs.	Income *per capita* Rs.	Consumption Expenditure *per capita* Rs.
Eastern	5·0	1·6	624	644	125	128
Central	4·1	1·5	511	490	125	122
Western	3·8	1·4	550	531	145	140
Terai	3·4	1·2	428	431	126	126
Southern	4·3	1·4	524	511	122	119
State	4·2	1·5	551	548	128	130

NOTE :—The eastern zone relates to the census division covering 10 districts of easter U. P.

The *per capita* income of agricultural labour in the eastern zone does not compare unfavourably with that of similar labour in other zones except the western zone. This is partly due to the fact that the proportion of families owning land to the total number is greater in the eastern zone than in any other zone. In a normal year, the question is only of supplies to meet the deficit in these districts. But in a year of poor crops, which is often the result of floods and sometimes of drought, the low purchasing power of the people, who depend to an overwhelming extent on agriculture in these districts, aggravates the situation. In such a time, the question is not merely of making supplies available but also of making them available at cheap rates.

Need for Government supplies on a continuing basis.

10.22 In a year of normal output in these districts, private trade can be relied upon to meet the deficit of the area only if the position of the State as a whole is one of comfortable surplus. But when U.P. as a whole is on the margin or is deficit, it does not seem safe to depend on private trade to meet the needs of the eastern districts, without incurring the risk of an undue rise in prices. In such a situation, the deficit of the eastern districts is likely to put a disproportionately large pressure on the price position in the whole State. Unless, therefore, the State as a whole has a comfortable surplus, Government will have to undertake responsibility for the supply of foodgrains to this area. When, however, crops in these districts are affected by floods or drought Government will have to undertake distribution, irrespective of whether the rest of the State is in a deficit or surplus position. At least for some years to come, the State as a whole is not likely to have a comfortable surplus while these deficit districts will continue to be exposed to floods and drought. Therefore, arrangements for Government supplies to this area on a continuing basis will be necessary.

Exports.

10.23 Despite its being deficit, the region is a substantial exporter of certain foodgrains. These exports enlarge its deficit which is met by imports from the rest of U.P. or from outside U.P. For instance the exports of important foodgrains from the Varanasi region during 1956-57 (April-March) were as under:

Exports from Varanasi Region

(In maunds)

	Within U. P.	Outside U. P.	Total
Rice	476,243	604,657	1,080,905
Paddy	59,663	176,205	235,368
Wheat	94,873	175,496	270,333
Gram	24,071	65,118	89,189
Maize	125,904	151,780	277,684

Rice constitutes a major component of these exports. Besides despatches to Bihar and parts of West Bengal, large exports from this region take place to Bombay State also.

Ban on exports on private account.

10.24 The relevant question is whether there is any justification for permitting free exports from this chronically deficit area. On the one hand, Government has to undertake the responsibility of supplying large quantities of foodgrains to this area and on the other exports of foodgrains are allowed freely. During the period April-September, 1957, roughly one and a half lakh tons of wheat and coarse grains have been distributed to the people in these districts through fair-price shops. We have explained above that under the assumptions that can reasonably be made Government will have to undertake responsibility for supplying foodgrains to this area on a continuing basis. It is necessary that exports on private account from these districts should be banned.

Unbalanced character of the economy.

10.25 As already stated, agriculture being the main source of income of the people, any severe damage to crops, in addition to enlarging the deficit creates the problem of low purchasing power. The problem often is not lack of flow of supplies from other areas but lack of means to buy. Opening of test relief works is only a palliative. The solution lies in correcting the unbalanced character of the economy by increasing and diversifying employment opportunities through promotion of village and small-scale industries besides provision of better irrigation facilities for agriculture and protecting the economy against flood hazards.

CHAPTER XI

CONCLUSION

11.1 The assessment that we have made of the likely supply and of the demand for foodgrains shows that food position will continue to be difficult. It is for that reason that we have emphasised the need for price stabilisation, control over trade of foodgrains and its progressive socialisation. Our recommendations when implemented, will materially reduce the fluctuations in prices and attendant hardships caused both to the producers and the consumers.

11.2 For an effective solution of the food problem, not only determined and all out efforts to step up production have to be made but the high rate of increase of population has to be checked. We, therefore, urge that a nation-wide campaign for family planning enlisting the efforts and energies of social workers particularly women, medical men, scientists, sociologists, economists, administrators and political leaders be launched.

11.3 The gravity of the food situation demands national efforts transcending regional and party considerations. Given a sympathetic policy and helpful administration we have no doubt that our cultivators are capable of greatly accelerating production. If India can become the pace-setter in constructing major irrigation projects in the world, there is no reason to believe that her agriculturists cannot match the strides of her engineers. What is needed is a sense of urgency and mobilisation of popular energies on a national scale.

11.4 Success of food policy, in the conditions prevailing, demands understanding and co-operation from the people. Adequate and effective contact with the people and flow of information both ways are, therefore, the *sine qua non* of success. In the great experiment of economic development through political democracy that our country is engaged in, the crucial position is occupied by food policy.

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B. K. MADAN
S. R. SEN

NEW DELHI;
November, 1957.

APPENDICES

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APPENDIX I

RESOLUTION

GOVERNMENT OF INDIA

MINISTRY OF FOOD AND AGRICULTURE

(DEPARTMENT OF FOOD)

New Delhi, the 24th June, 1957.

RESOLUTION

No. 158(1)/57-PY.I.—The Government of India have been pleased to appoint a Committee to enquire into certain aspects of the present food situation. The Committee will consist of the following members—

1	Shri Asoka Mehta	Chairman.
2	Shri M. Thirumala Rao, MP	Member.
3	Shri S. F. B. Tyabji, MP	Member.
4	Raja Surendra Singh of Nalagarh, MLA, Punjab .	Member.
5	Shri Venkatesh Narayan Tivary, Uttar Pradesh .	Member.
6	Shri B. K. Madan, Principal Adviser to the Reserve Bank of India	Member.
7	Dr. S. R. Sen, Economic and Statistical Adviser, Ministry of Food and Agriculture . . .	Member-Secretary.

The terms of reference of the Committee will be as follows :

(1) to review the present food situation and to examine the causes of the rising trend of food prices since about the middle of 1955 ;

(2) to assess the likely trends in demand and availability of foodgrains over the next few years, taking into account.

(a) the steps taken and those proposed to be taken under the Second Five Year Plan by the Central and the State Governments to increase food production,

(b) the impact of growing development expenditure, increase in population and urbanisation, on the demand for marketable surpluses,

(c) availability of foodgrains from abroad in relation to requirements and in the light of the foreign exchange position ; and

(3) To make recommendations to ensure a level of prices which would provide the necessary incentive to the producer with due regard to the interest of the consumer and the maintenance of a reasonable cost structure in the economy.

2. The Committee is requested to submit its report within three months.

Ordered that a copy of this Resolution be communicated to all the State Governments, all Ministries of the Government of India, Cabinet Secretariat, Prime Minister's Secretariat, the Private Secretary to the President, Planning Commission, the Comptroller and Auditor General of India, the Accountant General, Central Revenues and the Chief Audit Officer, Food, Rehabilitation and Supply, New Delhi.

Ordered also that this Resolution be published in the *Gazette of India,* for general information.

C. A. RAMAKRISHNAN,

Joint Secretary to the Government of India.

APPENDIX II

Correspondence between Chairman, Foodgrains Enquiry Committee and Minister for Food and Agriculture on Problem Areas

COPY OF D. O. LETTER, DATED SEPTEMBER 19, 1957 FROM SHRI AJIT PRASAD JAIN (MINISTER FOR FOOD AND AGRICULTURE) TO SHRI ASOKA MEHTA (CHAIRMAN, FOODGRAINS ENQUIRY COMMITTEE.)

During the course of your tour, I am sure, you must have come across certain areas where the food problem has been a recurring one, at any rate, for some years. The eastern districts of Uttar Pradesh have presented a somewhat difficult recurring problem due to one or the other reason. It is not my intention to burden the Committee with any larger responsibility than what was originally thought of. For one thing, your work is of such an important and urgent nature that it should not be delayed. Nonetheless, I shall be grateful if you could specially examine the problem of the areas where the nature of the food problem has been one of recurring nature and pay more attention to the food problem of the eastern U. P. I hope I am not causing you any inconvenience.

With best of regards.

COPY OF D. O. LETTER NO. F. 1.11/57-FEC-ES, DATED SEPTEMBER 23, 1957 FROM SHRI ASOKA MEHTA (CHAIRMAN, FOODGRAINS ENQUIRY COMMITTEE) TO SHRI AJIT PRASAD JAIN (MINISTER FOR FOOD AND AGRICULTURE).

Thank you for your letter of 19th instant.

The Members of our Committee are mostly out of Delhi and I am therefore not able to consult them. The Committee will re-assemble on 5th October and I shall then place your letter before my colleagues.

It will help me, and I hope my colleagues too, if, in the meantime, you will kindly find some time to send me clarification on the following points :—

The terms of reference of our Committee require us to make a broad, all-India survey of the food position, of its prospects and make the necessary recommendations. It is, if I may say so, a macro-economic survey. In the short time at our disposal we have not been able to look into the difficulties of specially hard areas in different States. To do that adequately would considerably delay the finalisation of our Report. I am sure you want the Committee to submit its findings and recommendation before the end of October.

There are, in almost every State, areas where the food problem has been a recurring one. Apart from the general survey of the nation's food problem, the difficulties of these areas would have to be looked into separately, in many cases intensively, before significant suggestions for redress of the situation can be offered. I do not know whether you would want to burden the Committee with that work, and I am not sure whether the Committee would want to accept such a heavy responsibility.

About your suggestion to us to specially examine the food problem of the eastern districts of U. P., speaking for myself, I would say that such an enquiry will probably have to look into the difficulties created by (*a*) natural calamities, (*b*) backward conditions of agriculture due to (*i*) neglect of the area under British rule (*ii*) lack of resources with the agriculturists, (*c*) lack of purchasing power among the people arising out of (*i*) inadequate employment opportunities, (*ii*) ill-balanced economy of the area. Would you like the Committee to go into these and allied aspects of the problem, in case it is found that that is necessary to arrive at significant solutions ?

If my colleagues share my views and if you also feel that the stubborn problems of eastern districts of U. P., would demand an on-the-spot study too, I am sure you will agree that this additional enquiry should be taken up only after our general Report is submitted, and present the findings and recommendations of the latter survey, restricted in area but intensive in enquiry, as a supplementary Report later on.

I shall be grateful to you for an early reply.

COPY OF D. O. NO. C2601/57/FAM, DATED SEPTEMBER 24, 1957, FROM SHRI AJIT PRASAD JAIN (MINISTER FOR FOOD AND AGRICULTURE) TO SHRI ASOKA MEHTA (CHAIRMAN, FOODGRAINS ENQUIRY COMMITTEE).

Please refer to your D. O. No. F.1.11/57/FEC-ES, dated the 23rd September, 1957.

You are correct in presuming that the Government of India would expect your report to be submitted before the end of October.

So far as the question of dealing with the problem of hard areas and of the eastern districts of U. P. is concerned, I fully agree with you that the investigation will need considerable time. In enumerating the various causes, you have included some which are not within the compass of this Ministry. They involve larger financial and economic matters. I am not, therefore, in a position to burden you with any responsibility which transcends the jurisdiction of this Ministry.

In making the request, however, what I had in view was that you may look into the problem of the hard regions somewhat more carefully and recommend that any of the schemes which you will generally be recommending should be especially intensified or modified with a view to overcome the problem of these areas. You will also agree with me that any enlargement of the scope of the enquiry will not be fair to your Committee. In the circumstances, I would not like you to do any additional enquiry into the problems of any hard areas or the eastern districts of U. P. after the submission of the report. However, such suggestions as are considered feasible and can be included in the main report, may be given.

Thanking you.

COPY OF D. O. LETTER NO. F.1.11/57-FEC-ES, DATED SEPTEMBER 25, 1957 FROM SHRI ASOKA MEHTA (CHAIRMAN, FOODGRAINS ENQUIRY COMMITTEE) TO SHRI AJIT PRASAD JAIN (MINISTER FOR FOOD AND AGRICULTURE).

Thank you for your letter of 24th instant.

I shall place this letter together with your earlier letter before our Committee. I am sure the Committee will do its best about the task outlined in the last paragraph of your letter.

APPENDIX III

Foodgrains Enquiry Committee

Questionnaire

1. What are the main measures for increasing food production in your State ? How have these been working in respect of—

(a) Major irrigation.

(b) Minor irrigation.

(c) Fertilisers and manures.

(d) Better seeds.

(e) Land development.

(f) Improved techniques.

(g) Community Projects and National Extension Service.

Have you any suggestions for ensuring the success of the food production programme ? Does their implementation require action within the State or assistance from the Government of India ?

2. Are there any marked regional variations within your State regarding the extent of rise in prices of various foodgrains ? Are there any special factors in your State operating on food prices concerning (a) state of production in the last two years, (b) the transport situation and (c) increased pressure of demand for foodgrains (i) from within the State (ii) from outside the State?

3. To what extent in your opinion is the rise in food prices in your State the result of (a) shrinkage in marketed surplus of foodgrains owing to increased consumption or holding of grains by the producer (b) growth of demand from urban and other classes of consumers ?

4. Are more foodgrains being held in the villages and less being marketed immediately or shortly following the harvest ? Do you find evidence of this tendency in slower or smaller market arrivals in any centres or areas for which you have information ?

5. Is it the substantial producer with irrigated land alone who holds paddy or rice longer, or does the medium farmer also benefit by this process ? How far down in terms of size of holding (a) irrigated and (b) non-irrigated, does this tendency extend ?

6. What are the main sources of finance for the farmer which enable the producer to hold longer ? To what extent does the farmer find it possible to hold the produce out of his own resources ? To what extent does he borrow and from whom—(a) money-lenders, (b) cooperative banks, (c) commercial banks ?

7. (a) How does the actual "marketed surplus" in 1956-57 compared to that in 1955-56 for different foodgrains in any specific area or areas which you can mention ?

(b) In the areas you know, how does stock holding of different foodgrains by (i) traders and (ii) millers this year compare to that in last year ?

8. In your opinion, what bearing do land reforms have on (a) food output and (b) marketed surplus ?

9. Would you favour control of prices of foodgrains by way of fixation of maximum prices ? What measure would you suggest to enforce the legal maxima ?

10. Would you recommend compulsory procurement of foodgrains in selected surplus areas with a view to meeting the requirements of deficit areas ? What other measures would you suggest to minimise tendencies to hoarding by (a) the trader (b) the

producer ? To what extent should these measures include (*i*) better supply of producers' goods, *e.g.*, fertilisers, (*ii*) better supply of consumer's goods, *e.g.*, cloth and (*iii*) better provision of facilities for saving ?

11. Would you recommend restriction of movement of foodgrains to destinations (*a*) outside a fairly large zone, and what zone in respect of your State, (*b*) outside a smaller area of a group of districts or a district (*c*) outside a village, except to the convenient marketing centre or mandi, with a view to assisting in procurement operations ?

12. To what extent would you suggest that Government should undertake liability for distribution of foodgrains ?

13. What steps other than rationing of rice would you suggest for conserving supplies of rice ?

14. How would you define an integrated price structure ? Do you consider that Government should undertake the responsibility for maintaining such a structure ?

15. What measures do you consider necessary to enable an integrated price structure to be maintained ? How far do you think is the maintenance of such a structure essential to the Plan ?

16. Short of an integrated price structure covering all or most of the important commodities, what kind of price policy in respect of foodgrains would you recommend?

17. Do you consider it expedient or desirable in the interest of maximising food production to declare minimum prices for various foodgrains at which Government undertakes to buy all quantities offered ? Would you favour announcing such minimum prices immediately or as and when prices show a marked tendency to decline ? Or, would you rely for the purpose of preventing a serious fall in prices on open market purchases by Government without any announcement of minimum prices?

18. How far do high prices make for larger production of foodgrains ? What is the reaction of the farmer, as observed by you, according to whether he is (*a*) a substantial producer with a surplus or (*b*) a small self-sufficient farmer ?

19. Have fair price shops in the area or areas for which you have information generally succeeded in bringing down prices to more reasonable levels. Has their working been characterised by any malpractices ? Have you any suggestion to make for improvement of their working ?

20. Would you recommend a system of limiting the subsidised issue of foodgrains only to vulnerable sections of the urban population ?

How would you define such vulnerable sections of the population ? How would you ensure that the benefit of concessional supplies is restricted to the classes of people for whom it would be intended?

21. Having regard to the long-term prospect of shortage of rice, would you suggest any steps being taken by way of propaganda or otherwise to promote the larger consumption of wheat in rice-consuming areas ?

22. What do you think of the possibilities of greater use of subsidiary foods in the dietary of the people in a long-term solution of the Indian food problem ? What concrete steps would you recommend in this direction ?

APPENDIX IV

Statistics of Food Production

The total production of a crop is calculated as the product of (*a*) the acreage under the crop and (*b*) the average yield per acre. The determination of the acreage involves (*i*) cadastral survey of the cultivable area and (*ii*) annual reports as to the area under each crop from the primary reporting authorities. The annual reports mentioned as (*ii*) may be substituted by sample acreage surveys where there are no primary reporting authorities as has been done in West Bengal. The determination of the yield per acre also has two aspects : (*i*) the fixation of the normal yields, and (*ii*) annual reports of the primary reporting authority as to the ratio, usually expressed as so many annas in the Rupee, which the year's crop bears to the normal yield. This is the traditional or so-called annawari method. This traditional method has now been substituted in most parts of India by the more systematic method of random sample crop-cutting surveys.

2. In the early stages, the collection of agricultural statistics, such as they were, formed part of the Land Revenue Administration. Serious attention to their accuracy came to be bestowed only after the emergencies created by World War II, when the sudden stoppage of imports from Burma and the shortfall of supply resulted in the Bengal famine and scarcity in many parts of the country. These happenings brought home the inadequacy of the then existing statistics and the need for more reliable data.

3. The nucleus statistical organisations that had come into being were faced with new problems with the integration of the States. Many of the States, particularly in the Rajasthan area and large areas in Hyderabad, had no revenue agency which could be used as the primary reporting agency. West Bengal had solved the problem of similar lack of primary reporting agency by instituting a scientific system of sample surveys for determining the areas under different crops.

4. At present the entire country can be divided into the following four categories of areas :

(*a*) Cadastrally surveyed and possessing a primary reporting agency ;

(*b*) Cadastrally surveyed but not possessing a primary reporting agency ;

(*c*) Unsurveyed but possessing a primary reporting agency ;

(*d*) Unsurveyed and also without a primary reporting agency.

A demarcation of the geographical area into the above four categories becomes complicated, but most of the temporarily settled areas of Andhra Pradesh, Bombay, Madras, Madhya Pradesh, Punjab, Uttar Pradesh and Mysore, and the permanently settled State of Bihar fall under category (*a*). The permanently settled areas of West Bengal and Orissa belong to category (*b*). The areas under category (*c*) are mostly large pockets within the temporarily settled parts of the country. Category (*d*) consists mainly of former jagir areas. Of the total area of the country, about 69 per cent. falls under category (*a*), 7 per cent. under category (*b*), another 13 per cent. under category (*c*) and the remaining 11 per cent. under category (*d*).

5. From Statement No. I, it will be seen that statistics in 18·9 per cent. of the total land area are based on estimation. The largest blocks in this category are situated in Madhya Pradesh, Orissa, Uttar Pradesh, Rajasthan and Kutch. In Orissa, the production of as much as 38·4 million acres is based on estimation. Since Orissa is an important producer of rice, the significance of this is apparent. The 10·8 per cent. of the area, which is completely non-reporting includes 18·6 million acres in Assam.

6. The machinery for collecting statistics falls into two sections. The first is at the State level. Most of the States have now established their statistical organisations working under the direction of qualified statisticians. Further, since any collection of statistics must be based on a proper cadastral survey, making of such surveys in the unsurveyed areas is essential and is being proceeded with. Under the First Plan, Government of India had

extended financial assistance to the States of U. P., Rajasthan, Andhra Pradesh, Saurashtra, Mysore and Madras for expediting cadastral surveys. The primary reporting agency is generally the patwari or other village official. While some of these officials may not be thought capable of making accurate estimates of the area under crop and of the yield per acre during the year, the Committee believes that the estimates made by most of the village officials, based on their knowledge of local conditions, are reasonably accurate. The results of such reports are usually consolidated at the taluka and district levels and then forwarded to the State Statistician. In many of the States, the supervision of and check over the work of the primary reporting agencies is not adequate. We understand that with financial assistance from the Government of India, steps are being taken in a number of States to institute proper supervision over the work of the primary reporting agency.

7. At the Union level, the crop cutting experiments are supervised and directed by the National Sample Survey Organisation. The food statistics when received from the State Statisticians, whether collected by the traditional annawari method or by the crop cutting method, are received in the Directorate of Economics and Statistics of the Ministry of Food and Agriculture and processed there.

8. The change over from the traditional method to the crop-cutting method started from 1947-48 and was largely completed in the major States by 1955-56, the last State to adopt it being Madras. The striking exception is the State of Orissa where crop-cutting experiments are not being conducted and it is essential that the State should fall in line with the rest of the country. At present 92 per cent. of the production of wheat, 87 per cent. of the production of rice and 75 per cent. of the production of all cereals are being estimated on the basis of the results of crop-cutting experiments. The random sample crop cutting method has been developed in India over a decade or so and has been recommended by the Food and Agricultural Organisation for adoption in other countries. We were not able fully to examine the results of this new method and we have used such statistics as were available to us.

9. Statement No. II gives the details of the areas into which the crop-cutting method has been introduced. The introduction of this method was gradual but its introduction coupled with the increase in the coverage of the estimates created a new problem for the more accurate figures of production obtained by this method were not comparable to the figures obtained by the former traditional method. An attempt has, however, been made to overcome this difficulty of incomparability by the framing of indices of production by the Directorate of Economics and Statistics of the Ministry of Food and Agriculture in 1954 by making certain assumptions. This series of index numbers has as base the agricultural year 1949-50 and covers 28 crops, 11 under foodgrains and 17 under non-foodgrains (See Statement III). The crops included are :

Foodgrains :

Cereals	Rice, Jowar, Bajra, Maize, Ragi, Wheat Barley and Small Millets.
Pulses	Gram, Tur, Other Pulses.

Non-Foodgrains :

Oilseeds	Groundnut, Sesamum, Rape and Mustard Linseed and Castor Seed.
Fibres	Cotton, Jute, Mesta.
Plantation Crops	Tea, Coffee, Rubber.
Miscellaneous Crops	Sugarcane, Pepper, Tobacco, Potato, Ginger, Chillies.

The series considers gross production, no allowance being made for seed or wastage. Minor crops and livestock products are excluded from the scope of the index, as reliable estimates of production in respect of these are not available.

10. The index numbers for each year are provisionally computed on the Final Fore-cast figures and when the Revised Estimates for the year become available, the final index for the year is computed. Weights have been assigned to the different commodities in proportion to the total value of production of each during the base period. The sub-group, the group and the all-commodities indices are obtained as weighted arithmetic averages of production indices of individual commodities.

11. As stated above, the gradual introduction of the crop-cutting method and the increase in coverage have introduced an element of non-comparability in the production figures. To take care of this, the index numbers have been constructed by the chain base method, which becomes possible by the fact that during the transition year, the production is estimated both by the traditional method and the crop-cutting method. This method involves the following assumptions:

(1) that the variation in aggregate production in the non-reporting areas is the same as that in the reporting areas ;

(2) that the relative changes in production are the same in both methods of estimation.

In some cases where during the year of change estimates for both methods have not been available, due allowance for changes in coverage has been made and this made them comparable.

STATEMENT I

Coverage of Agricultural Statistics according to different methods of reporting

(Million Acres)

States	Area reported in Agricultural Statistics Returns.					
	Total geographical area	Sample survey	Complete enumeration	Estimated	Total	Non-reporting
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra	40·7	..	37·9	2·7	40·6	0·1
2. Assam	54·4	..	33·0	2·8	35·8	18·6
3. Bihar	45·0	..	44·8	..	44·8	0·2
4. Bombay	71·2	..	64·9	6·1	71·0	0·2
5. Madhya Pradesh	83·4	..	59·8	23·0	82·8	0·6
6. Madras	38·6	..	27·7	10·8	38·5	0·1
7. Orissa	38·6	..	..	38·4	38·4	0·2
8. Punjab	23·7	..	19·3	4·4	23·7	..
9. Uttar Pradesh	72·6	..	62·3	10·2	72·5	0·1
10. West Bengal	19·7	17·4	..	2·3	19·7	..
11. Hyderabad	52·6	..	50·8	0·3	51·1	1·5
12. Jammu and Kashmir	55·0	..	5·8	0·1	5·9	49·1

APPENDIX IV—*contd.*

STATEMENT I—*contd.*

Coverage of Agricultural Statistics according to different methods of reporting—contd.

(Million Acres)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
13. Madhya Bharat	29·8	..	27·4	0·9	28·3	1·5
14. Mysore	21·3	..	19·9	..	19·9	1·4
15. P.E.P.S.U.	6·4	..	6·4	..	6·4	..
16. Rajasthan	83·3	..	55·4	27·7	83·1	0·2
17. Saurashtra	13·7	..	8·3	4·0	12·3	1·4
18. Travancore-Cochin	5·8	..	0·9	4·8	5·7	0·1
19. Ajmer	1·5	..	0·5	1·0	1·5	..
20. Bhopal	4·4	..	4·4	..	4·4	..
21. Coorg	1·0	..	0·7	0·3	1·0	..
22. Delhi	0·4	..	0·4	..	0·4	..
23. Himachal Pradesh	7·0	..	2·2	0·1	2·3	4·7
24. Kutch	10·9	..	1·3	9·6	10·9	..
25. Manipur	5·5	..	..	0·4	0·4	5·1
26. Tripura	2·6	..	..	2·6	2·6	..
27. Vindhya Pradesh.	15·1	..	14·7	0·1	14·8	0·3
28. Andaman and Nicobar Islands	2·1	..	..	0·1	0·1	2·0
TOTAL ALL INDIA	806·3 (100·0)	17·4 (2·2)	548·8 (68·1)	152·7 (18·9)	718·9 (89·2)	87·4 (10·8)
TOTAL EXCLUDING JAMMU & KASHMIR	751·3 (100·0)	17·4 (2·3)	543·0 (72·3)	152·6 (20·3)	713·0 (94·9)	38·3 (5·1)

NOTES.—1. Figures relate to old set up of States prior to their reorganisation on 1st November, 1956.

2. Figures in brackets show percentages to total geographical area.

APPENDIX IV—*contd.*

STATEMENT II

Adoption of Crop Cutting Method for Yield Estimation in the States

Crop	Year from which the method of crop cutting surveys has been adopted	State*
Rice	1947-48	West Bengal.
	1948-49	Bihar.
	1949-50	Bombay.
	1950-51	Uttar Pradesh.
	1951-52	Assam (Plain districts), Madhya Pradesh, Punjab, Mysore, Bhopal.
	1952-53	Hyderabad, Coorg, Vindhya Pradesh.
	1953-54	Andhra, Himachal Pradesh.
	1955-56	Madras.†
Wheat	1948-49	Bihar.
	1949-50	Bombay, Uttar Pradesh, West Bengal.
	1951-52	Madhya Pradesh, Punjab, Hyderabad, PEPSU, Rajasthan, Bhopal.
	1952-53	Ajmer, Delhi, Vindhya Pradesh.
	1953-54	Himachal Pradesh.
Jowar	1949-50	Bombay.
	1950-51	Uttar Pradesh.
	1951-52	Madhya Pradesh, Mysore, Bhopal.
	1952-53	Punjab, Hyderabad, Rajasthan, Vindhya Pradesh.
	1953-54	Ajmer.
	1954-55	Andhra.
	1955-56	Madras.†
Bajra	1949-50	Bombay.
	1950-51	Uttar Pradesh.
	1951-52	Mysore, Bhopal.
	1952-53	Punjab, Hyderabad, PEPSU, Rajasthan.
	1955-56	Madras.†
Maize	1950-51	Uttar Pradesh.
	1951-52	Bombay.
	1952-53	Punjab, Hyderabad, PEPSU, Rajasthan, Vindhya Pradesh.
	1953-54	Ajmer.
Barley	1949-50	Bihar, Uttar Pradesh, West Bengal.
	1951-52	Punjab, Rajasthan.
	1952-53	Vindhya Pradesh.
	1953-54	Ajmer.

*Set-up of States prior to Reorganization.

†Reorganised State.

APPENDIX IV—*contd.*

STATEMENT III.

Index Numbers of Agricultural Production in India.

(Base : Agricultural Year 1949-50=100)

Commodity/Group.	Weight	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)*	(9)*
I. Foodgrains :								
(*a*) Cereals :								
(*i*) Kharif :								
Rice	35·3	87·9	90·1	96·8	118·6	105·5	112·7	118·1
Jowar	5·0	89·8	96·4	106·6	117·0	133·4	98·5	110·6
Bajra	2·7	83·8	75·8	94·8	135·0	106·3	108·3	93·8
Maize	2·1	84·4	101·3	123·3	130·2	127·9	111·1	131·4
Ragi	1·2	87·6	80·4	82·0	115·0	108·8	118·6	124·7
Small Millets . . .	1·5	88·9	97·4	97·9	125·9	127·0	100·1	103·9
Kharif Cereals . . .	47·8	87·7	90·4	98·5	120·0	110·2	110·6	116·2

(*ii*) Rabi :								
Wheat	8·5	101·1	93·9	112·7	120·0	133·7	130·5	138·1
Barley	2·0	105·6	100·0	122·4	123·2	121·7	116·6	116·4
Rabi Cereals	10·5	102·0	95·1	114·5	120·6	131·4	127·9	134·0
Cereals	58·3	90·3	91·2	101·4	120·1	114·0	113·7	119·4
(*b*) Pulses :								
Gram	3·7	98·0	88·2	109·2	125·4	142·2	140·6	156·4
Tur	1·1	91·8	97·7	90·9	99·5	91·6	99·3	111·1
Other pulses	3·8	85·6	90·2	90·9	102·6	100·6	88·4*	89·2*
Pulses	8·6	91·7	90·3	98·8	112·0	117·3	112·3	120·9
Foodgrains	66·9	90·5	91·1	101·1	119·1	114·4	113·5	119·6
II. Non-Foodgrains :								
(*i*) Oilseeds :								
Groundnut	5·7	101·4	93·0	85·3	100·3	122·1	114·2	120·8
Sesamum	1·2	101·6	103·2	106·9	127·6	135·7	105·3	103·9
Rape and Mustard	2·0	94·6	116·0	105·5	107·3	127·4	103·6	124·7
Linseed	0·8	87·8	77·1	86·0	89·1	89·8	96·4	81·1
Castorseed	0·2	80·5	82·8	79·7	80·5	96·9	96·9	100·8
Oilseeds	9·9	98·5	97·4	91·9	103·7	121·7	109·2	115·9

(STATEMENT III—*contd.*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(*b*) Fibres :								
Cotton	2·8	110·7	119·2	121·0	151·8	163·1	151·6	179·3
Jute	1·4	106·3	151·4	148·6	100·0	94·7	135·7	136·5
Mesta . . .	0·3	100·0	104·8	103·3	98·5	154·3	175·7	223·5
Fibres . . .	4·5	108·6	128·3	128·4	132·1	141·2	148·3	168·9
(*c*) Plantation crops :								
Tea	3·3	103·8	109·6	115·4	100·6	110·7	113·3*	113·4*
Coffee	0·2	112·3	112·7	125·9	146·5	148·1	197·1*	222·8*
Rubber	0·1	93·8	94·4	106·1	131·8	127·6	133·5*	139·2*
Plantation crops . .	3·6	104·0	109·4	115·7	104·0	113·2	118·5	120·2
(*d*) Miscellaneous Crops :								
Sugarcane . . .	8·7	113·7	122·8	101·6	89·5	116·7	121·2	136·7
Tobacco	1·9	97·3	78·0	91·3	101·5	93·9	98·1*	97·7*
Potato	1·0	107·4	110·8	128·9	126·5	115·8	120·9*	124·9*
Chillies	2·0	119·4	118·4	98·0	104·9	125·7	122·9	122·6

Ginger	0·3	94·4	96·0	89·6	90·9	92·2	100·8	98·2
Pepper	1·2	97·2	107·5	102·8	113·3	122·8	152·8	150·4
Miscellaneous Crops .	15·1	110·3	114·0	101·5	97·4	115·0	120·6	129·5
NON-FOODGRAINS . .	33·1	105·9	110·5	103·8	104·7	120·4	120·7	129·8
ALL COMMODITIES . .	100·0	95·6	97·5	102·0	114·3	116·4	115·9	123·0

*Based on provisional estimates.

NOTE.—The indices for 1954-55 and 1955-56 are based on Partially Revised Estimates while those for 1956-57 are generally based on Final Estimates and are therefore subject to revision.

APPENDIX V

1·1 *Selected Economic Indicators*

Money Supply with the Public

(In crores of Rupees)

Year	Money Supply
1950-51	1,980
1951-52	1,804
1952-53	1,765
1953-54	1,794
1954-55	1,921
1955-56	2,184
1956-57	2,313

Source :—Report on 'Currency and Finance' published by the Reserve Bank of India.

N.B.—The data have been utilized in Chart I.

1·2 *Selected Economic Indicators*

Total Bank Credit, Plan Expenditure and Deficit Financing

(In crores of Rupees)

Year	Total Bank Credit (*a*)	Plan Expenditure (*b*)	Deficit Financing (*c*)
1951-52	546·40	259·4	..
1952-53	500·11	267·6	80
1953-54	494·19	343·0	78
1954-55	553·05	475·9	93
1955-56	632·45	666·5	180
1956-57	781·65	..	253

Source : (*a*) Data have been taken from Report on Currency and Finance by the Reserve Bank of India.

(*b*) Data have been taken from the Review of First Five Year Plan.

(*c*) Data have been obtained from the Reserve Bank of India.

N.B.—The data have been utilised in Chart I.

APPENDIX V—*contd.*

1·3 *Selected Economic Indicators*

Wholesale Price Index : Cereals, Manufactures and General

(Base : year ended August 1939=100)

Year	Cereals	Manufactures	General
1949-50—			
April	459	347·0	376·1
May	464	347·1	377·1
June	470	349·2	378·3
July	469	344·7	380·6
August	474	348·6	389·0
September	464	351·4	389·8
October	465	352·6	393·3
November	460	344·2	390·2
December	435	343·8	381·3
January	431	344·6	384·7
February	444	346·5	392·3
March	454	347·4	392·4
1950-51—			
April	458	347·8	391·3
May	456	348·3	393·3
June	456	347·6	395·6
July	475	348·2	405·2
August	478	349·9	409·2
September	485	350·4	412·5
October	495	350·4	411·2
November	521	349·5	410·9
December	510	350·0	412·6
January	487	353·5	414·3
February	487	369·7	423·4
March	488	387·2	438·6

APPENDIX V—*contd.*

1·3 *Selected Economic Indicators—(contd.)*

Wholesale Price Index : Cereals, Manufactures and General

(Base : year ended August 1939=100)

Year	Cereals	Manufactures	General
1951-52—			
April	490	411·7	457·5
May	489	410·2	456·8
June	486	409·4	456·5
July	480	405·6	447·0
August	480	399·1	437·6
September	494	399·5	435·1
October	486	401·9	438·0
November	469	400·2	435·6
December	464	402·1	433·1
January	465	400·9	430·3
February	463	394·1	415·8
March	442	383·8	377·5
1952-53—			
April	444	381·2	377·8
May	444	371·2	367·1
June	445	373·6	374·8
July	457	368·7	383·8
August	464	366·4	387·4
September	459	370·3	389·0
October	442	379·0	387·5
November	447	374·3	383·4
December	431	367·6	372·5
January	434	365·9	377·5
February	430	367·8	381·5
March	437	369·0	385·2

Source : "Index Number of Wholesale Prices in India" issued by the office of the Economic Adviser to the Government of India.

N.B.—The data have been utilized in Chart I.

APPENDIX V—*contd.*

I·4. *Selected Economic Indicators*

Wholesale Price Index : Cereals, Manufactures and General

(Base : 1952-53=100)

Year	Cereals	Manufactures	General
1953-54—			
April	96	97·2	101·4
May	100	99·1	105·4
June	104	100·1	108·8
July	108	99·6	110·3
August	106	99·8	109·7
September	103	98·8	107·7
October	100	97·7	104·2
November	95	98·2	101·9
December	92	98·1	101·4
January	93	98·4	102·7
February	89	99·5	100·7
March	88	100·6	100·3
1954-55—			
April	89	101·7	103·4
May	86	102·0	102·0
June	82	101·1	99·3
July	82	100·0	99·1
August	84	100·0	99·3
September	85	100·8	100·3
October	80	100·2	99·2
November	78	100·2	95·5
December	73	99·8	93·4
January	73	100·0	93·9
February	72	100·5	93·2
March	70	101·1	90·8
1955-56—			
April	68	99·7	88·9
May	67	99·0	89·4
June	69	98·2	89·7
July	75	98·5	92·9

APPENDIX V—*contd.*

1.4 *Selected Economic Indicators*—(*contd.*)

Wholesale Price Index : Cereals, Manufactures and General

(Base : 1952-53=100)

Year	Cereals	Manufactures	General
1955-56—contd.			
August	77	98·9	92·5
September	75	98·3	90·6
October	75	98·5	90·6
November	76	99·7	92·4
December	77	100·2	93·9
January	80	101·1	95·3
February	82	101·2	95·3
March	87	102·9	98·1
1956-57—			
April	89	102·9	100·1
May	90	103·0	100·9
June	95	103·4	102·0
July	95	104·2	103·4
August	99	105·5	106·4
September	99	108·8	106·8
October	98	108·1	106·6
November	100	108·2	108·6
December	97	108·6	107·9
January	95	108·4	107·2
February	100	107·4	106·9
March	99	106·2	105·5
1957-58—			
April	101	106·2	106·5
May	103	107·5	109·0
June	104	108·5	110·7
July	105	108·8	111·9
August	106	108·6	112·1
September	103	108·6	109·5
October	102	108·9	108·9

Source : ' Index Number of Wholesale Prices in India ' issued by the Office of the Economic Adviser to the Government of India.

N.B.—The data have been utilised in Chart I.

APPENDIX V—*contd.*

1·5. *Selected Economic Indicators*

Index of Wages of Factory Workers in Bombay Cotton Mills Industry and Consumer Price for Working Class at Bombay

(Base : 1952-53=100)

Year	Index of wages of factory workers in Bombay Cotton Mills Industry (*a*)	Index of Consumer Price for Working Class at Bombay (*b*)
1949-50	90·2	88·8
1950-51	92·3	92·2
1951-52	97·5	95·8
1952-53	100·0	100·0
1953-54	106·5	105·6
1954-55	106·4	103·9
1955-56	102·6	97·4
1956-57	111·2	103·3

Source : (*a*) Index in respect of wages has been calculated on the basis of annual average wage (April to March) earned during a year by factory workers in Bombay Cotton Mills Industry published in the Indian Labour Gazette.

(*b*) Indian Labour Gazette. Original base year is 1949 ; converted to 1952-53.

N.B.—The data have been utilized in Chart I.

1·6 *Selected Economic Indicators*

Index of Urban Employment

(Base : 1952-53=100)

Year/Month	Index of Employment
1951—	
June	99·4
September	99·3
December	100·3
1952—	
March	100·5
June	99·9
September	99·9
December	99·7

APPENDIX V—*contd.*

1·6—(*contd.*)

Year/month		Index of Employment
1953		
	March	100·5
	June	99·5
	September	99·2
	December	99·6
1954		
	March	100·0
	June	100·2
	September	100·0
	December	100·2
1955		
	March	101·1
	June	100·9
	September	100·2
	December	101·8
1956		
	March	101·3
	June	102·0
	September	101·2
	December	102·6
1957		
	March	103·8

Source : The Index has been calculated on the basis of Employment data furnished by the Planning Commission.

N. B.—The data have been utilised in Chart I.

1.7 *Selected Economic Indicators*

National Income (at 1948-49 Prices)

(In crores of Rupees)

Year	National Income
1949-50	8,820
1950-51	8,850
1951-52	9,100
1952-53	9,460
1953-54	10,030
1954-55	10,280
1955-56	10,420

Source : "Estimates of National Income (1948-49 to 1955-56)" issued by Central Statistical Organization.

N. B.—The data have been utilized in Chart I.

APPENDIX V—*contd.*

2.1 *Prices and Production of Selected Commodities*

Wholesale Price Index : Rice, Wheat, Jowar, Groundnut, Cotton Raw, Cotton Manufactures, Iron and Steel and Fertilizers.

(Base : year ended August, 1939=100)

Year	Rice	Wheat	Jowar	Groundnut	Cotton Raw	Cotton Manufactures	Iron and Steel	Fertilizers
1949-50								
April	498	640	239	645	417	387	196	252
May	498	643	256	643	413	389	201	252
June	505	612	282	659	415	389	225	252
July	505	590	293	674	414	379	225	252
August	510	586	307	705	412	376	225	252
September	501	557	307	713	413	375	225	256
October	498	550	334	707	417	378	225	256
November	498	548	304	594	420	358	225	256
December . .	489	520	238	615	421	358	216	256
January	479	502	263	662	423	358	211	256
February	482	513	310	699	423	357	211	256
March	494	521	317	697	431	357	211	256

2·1 (*contd.*)

Year	Rice	Wheat	Jowar	Groundnut	Cotton Raw	Cotton Manufactures	Iron and Steel	Fertilizers
1950-51 :								
April	500	518	325	701	432	357	211	256
May	499	514	320	741	427	353	211	256
June	496	512	333	738	437	353	211	256
July	515	540	351	760	457	353	211	252
August	523	534	344	792	469	353	211	252
September	536	535	347	794	..	353	211	252
October	548	536	359	752	467	353	211	248
November	559	552	464	699	495	353	211	248
December	552	604	371	763	496	353	211	248
January	538	607	294	821	496	354	211	248
February	535	596	307	820	495	379	211	248
March	542	582	304	814	491	382	210	248
1951-52								
April	555	560	300	828	491	410	210	248
May	563	531	300	856	495	410	210	248
June	552	534	307	855	500	410	210	248
July	535	533	323	790	505	410	217	248

August	538	533	313	696	506	410	217	248
September	566	532	310	678	511	410	219	267
October	559	530	297	714	506	410	219	279
November	537	530	269	687	509	410	219	279
December	539	524	250	663	508	410	219	279
January	541	517	256	669	504	410	219	275
February	539	513	255	610	504	410	219	275
March	519	510	217	476	367	410	219	275
1952-53								
April	527	498	216	499	380	410	219	295
May	527	500	215	491	374	390	219	295
June	520	529	214	493	408	394	219	295
July	529	551	225	529	441	389	245	295
August	546	554	218	589	460	389	245	295
September	543	556	204	613	466	389	251	295
October	527	556	177	621	439	409	269	283
November	519	565	202	589	388	406	268	283
December	492	557	199	557	388	406	267	283
January	493	559	205	566	393	406	267	260
February	486	562	205	643	406	406	267	260
March	492	568	207	709	446	406	267	260

Source : "Index Number of Wholesale Prices in India" issued by the Office of the Economic Adviser to the Govt. of India.

N.B.—The data have been utilized in Chart II,

APPENDIX V—*contd.*

2·2 *Prices and Production of Selected Commodities*

Wholesale Price Index : Rice, Wheat, Jowar, Groundnut, Cotton Raw, Cotton Manufactures, Iron and Steel and Fertilizers.

(Base : 1952-53=100)

Year	Rice	Wheat	Jowar	Groundnut	Cotton Raw	Cotton Manufactures	Iron and Steel	Fertilizers
1953-54 :								
April	99	90	98	132	100	104	106	92
May	103	92	106	143	100	104	106	92
June	107	95	108	146	99	106	106	92
July	112	98	107	156	100	106	106	92
August	110	97	106	153	101	109	108	92
September	107	95	103	151	101	109	108	92
October	103	93	99	119	104	107	108	92
November	97	91	93	95	104	104	108	92
December	93	92	92	100	105	103	108	92
January	91	94	98	110	109	104	109	92
February	87	89	96	108	111	107	109	92
March	87	88	94	110	108	111	109	89

1954-55 :								
April	90	87	96	108	107	111	110	86
May	89	78	95	107	106	112	110	86
June	88	68	87	96	103	112	110	86
July	86	71	88	96	101	111	110	86
August	89	74	82	84	101	111	110	86
September	90	76	77	82	100	111	110	86
October	83	76	77	76	106	109	110	86
November	81	73	74	73	104	109	110	86
December	74	72	71	71	104	109	110	86
January	73	77	65	66	101	109	110	86
February	72	77	57	65	98	108	110	86
March	72	71	53	64	92	110	110	86
955-56 :								
April	72	64	51	64	90	107	110	86
May	74	58	52	67	92	106	110	86
June	76	60	55	67	93	107	110	86
July	79	67	60	77	95	106	113	86
August	81	70	59	78	97	106	113	86
September	81	67	58	75	95	106	113	86
October	79	71	60	76	93	105	114	86

APPENDIX V—*contd.*

2·2 (*contd.*)

Year	Rice	Wheat	Jowar	Groundnut	Cotton Raw	Cotton Manufactures	Iron and Steel	Fertilizers
1955-56—*contd*								
November	78	74	63	77	92	106	126	86
December	76	80	71	83	102	106	126	86
January	77	85	83	91	101	107	126	86
February	79	85	91	95	106	107	126	86
March	86	85	102	102	107	111	126	86
1956-57 :								
April	92	79	111	110	111	112	126	86
May	93	79	112	116	117	112	126	86
June	95	82	120	111	111	113	128	86
July	97	85	122	108	106	115	132	86
August	100	88	125	115	108	116	132	86
September	101	87	127	115	109	122	132	86
October	100	87	133	110	110	121	132	86
November	99	92	136	109	109	119	132	86
December	93	94	127	105	109	117	132	86
January	91	94	119	111	111	117	132	86
February	96	97	119	107	113	116	132	86

March	97	95	118	112	113	115	132	88
1957-58 :								
April	101	93	124	113	111	116	132	96
May	106	90	126	116	112	116	138	96
June	107	89	128	116	112	116	143	96
July	108	89	128	117	111	117	143	96
August	111	89	122	112	112	117	143	96
September	108	87	112	105	100	117	143	96
October	107	88	113	105	97	117	143	96

Source : " Index Number of Wholesale Prices in India" issued by the Office of the Economic Adviser to the Government of India.

N. B.—The Data have been utilized in Chart II.

APPENDIX V—*contd.*

2·3 *Prices and Production of Selected Commodities.*

Index of Agricultural Production : Rice, Wheat, Jowar, Groundnut and Cotton Raw

(Base : 1949-50=100)

Year	Rice	Wheat	Jowar	Groundnut	Cotton raw
1949-50	100·0	100·0	100·0	100·0	100·0
1950-51	87·9	101·1	89·8	101·4	110·7
1951-52	90·1	93·9	96·4	93·0	119·2
1952-53	96·8	112·7	106·6	85·3	121·0
1953-54	118·6	120·0	117·0	100·3	151·8
1954-55	105·5	133·7	133·4	122·1	163·1
1955-56	112·7	130·5	98·5	114·2	151·6
1956-57	118·1	138·1	110·6	120·8	179·3

Source : Directorate of Economics and Statistics, Ministry of Food and Agriculture. 1956-57 indices are based on Final Estimates and are subject to revision.

N. B.—The data have been utilised in Chart II.

2·4 *Prices and Production of Selected Commodities.*

Index of Industrial Production : Cloth and Iron and Steel.

(Base : 1951=100.)

Year	Cloth	Iron and Steel
1951	100·0	100·0
1952	102·0	102·2
1953	109·5	95·7
1954	109·5	113·2
1955	109·2	113·3
1956	115·2	119·4
1957	112·3*	119·7**

*Average for 7 months.

** Average for 6 months.

Source : "Monthly Statistics of the Production of Selected Industries in India"—Ministry of Commerce and Industry Government of India.

N. B.—The data have been utilised in Chart II.

APPENDIX V—*contd.*

3. *Index of Price Ratios*

(Base : 1952-53 = 100)

Year	Index of prices received (Punjab)*	Index of prices Paid (Punjab)*	Parity between prices received and prices paid (Punjab)*	Index of prices of Cereals (All-India)	Index of prices of Cotton Manufactures (All-India)	Parity between Cereals and Cotton Manufactures (All-India)	Index of prices of Iron & Steel (All-India)	Parity between Cereals and Iron and Steel (All-India)
1	2	3	4	5	6	7	8	9
1953-54 :								
April	102·9	99·4	103·4	96	104	92·3	106	90·6
May	103·4	97·9	105·5	100	104	96·2	106	94·3
June	106·4	98·4	108·1	104	106	98·1	106	98·1
July	108·0	99·0	109·0	108	106	101·9	106	101·9
August	108·3	97·7	110·7	106	109	97·3	108	98·2
September	102·7	97·3	105·5	103	109	94·5	108	95·4
October	105·5	98·4	107·1	100	107	93·5	108	92·6
November	108·8	99·1	109·7	95	104	91·3	108	88·0
December	111·9	102·7	108·9	92	103	89·3	108	85·2
January	115·8	101·8	113·6	93	104	89·4	109	85·3
February	110·4	100·1	110·2	89	107	83·2	109	81·7
March	113·2	99·6	113·5	88	111	79·3	109	80·7

APPENDIX V—*contd.*

Year	Index of prices received (Punjab)*	Index of prices Paid (Punjab)	Parity between prices received and prices paid (Punjab)	Index of prices of Cereals (All India)	Index of prices of Cotton Manufactures (All India)	Parity between Cereals and Cotton Manufactures (All India)	Index of prices of Iron & Steel (All India)	Parity between Cereals and Iron and Steel (All India)
1	2	3	4	5	6	7	8	9
1954-55 :								
April	109·1	99·0	110·0	89	111	80·2	110	80·9
May	93·5	98·2	95·2	86	112	76·8	110	78·2
June	89·8	91·1	98·4	82	112	73·2	110	74·5
July	87·1	89·4	97·3	82	111	73·9	110	74·5
August	95·5	98·6	96·7	84	111	75·7	110	76·4
September	96·4	98·5	97·8	85	111	76·6	110	77·3
October	97·4	97·6	99·7	80	109	73·4	110	72·7
November	92·2	97·0	94·9	78	109	71·6	110	70·9
December	90·1	96·5	93·3	73	109	67·0	110	66·4
January	90·0	95·6	94·0	73	109	67·0	110	66·4
February	82·8	86·9	95·3	72	108	66·7	110	65·5
March	77·0	83·2	92·4	70	110	63·6	110	63·6

APPENDIX V—*contd.*

1	2	3	4	5	6	7	8	9
1955-56 :								
April	72·8	81·3	89·5	68	107	63·6	110	61·8
May	72·2	79·4	90·8	67	106	63·2	110	60·9
June	76·3	81·0	94·1	69	107	64·5	110	62·7
July	81·2	83·4	97·4	75	106	70·8	113	66·4
August	80·8	84·7	95·4	77	106	72·6	113	68·1
September	75·6	83·8	90·1	75	106	70·8	113	66·4
October	85·4	85·9	99·4	75	105	71·4	114	65·8
November	90·1	87·8	102·5	76	106	71·7	126	60·3
December	96·1	90·9	105·6	77	106	72·6	126	61·1
January	99·0	93·2	106·1	80	107	74·8	126	63·5
February	101·5	93·2	108·7	82	107	76·6	126	65·1
March	107·9	95·6	112·7	87	111	78·4	126	69·0
1956-57 :								
April	98·2	93·2	105·2	89	112	79·5	126	70·6
May	96·7	90·7	106·4	90	112	80·4	126	71·4
June	101·6	92·1	110·3	95	113	84·1	128	74·2
July	104·3	93·7	111·2	95	115	82·6	132	71·9
August	108·3	95·7	113·1	99	116	85·3	132	75·0
September	109·2	94·5	115·5	99	122	81·1	132	75·0
October	108·7	96·0	113·1	98	121	81·0	132	74·2

APPENDIX V—*contd.*

Year	Index of prices received (Punjab)*	Index of prices paid (Punjab)	Parity between prices received and prices paid (Punjab)	Index of prices of Cereals (All India)	Index of prices of Cotton Manufactures (All India)	Parity between Cereals and Cotton Manufactures (All-India)	Index of prices Iron and Steel (All-India)	Parity between Cereals and Iron and Steel (All-India)
November	115·6	100·6	114·8	100	119	84·0	132	75·8
December	113·8	103·7	109·6	97	117	82·9	1:2	73·5
January	114·7	103·9	110·2	95	117	81·2	132	71·9
February	115·6	105·0	110·0	100	116	86·2	132	75·8
March	..	..	..	99	115	86·1	132	75·0
1957-58 :								
April	..	..	..	101	116	87·1	132	76·5
May	..	..	..	103	116	88·8	138	74·6
June	..	..	..	104	116	89·7	143	72·7
July	..	..	..	105	117	89·7	143	73·4
August	..	..	..	106	117	90·6	143	74·1
September	..	..	..	103	117	88·0	143	72·0
October	..	..	..	102	117	87·2	143	71·3

*Original base 1939, converted to 1952-53.

N. B.—The data have been utilized in Chart III,

APPENDIX V—*contd.*

4. *Distribution of Plan Outlay*

By Major Heads of Development

Head of Development	First Five Year Plan		Second Five Year Plan	
	Provision (Rs. crores)	Percentage to total	Provision (Rs. crores)	Percentage to total
1. Agriculture and Community Development.	357	15·1	568	11·8
2. Irrigation and Power	661	28·1	913	19·0
3. Industry and Mining	179	7·6	890	18·5
4. Transport and Communications .	557	23·6	1,385	28·9
5. Social Services	533	22·6	945	19·7
6. Miscellaneous	69	3·0	99	2·1
TOTAL .	2,356	100·0	4,800	100·0

Source : Second Five Year Plan Report.

N.B.—The data have been utilised in Chart IV.

5. *Distribution of Plan Outlay*

Agriculture and Community Development

	First Five Year Plan		Second Five Year Plan	
	Provision (Rs. crores)	Percentage to total	Provision (Rs. crores)	Percentage to total
I. *Agriculture*				
1. Agricultural Programmes	197	55·1	170	29·9
2. Animal Husbandry	22	6·2	56	9·9
3. Forests	10	2·8	47	8·3
4. Fisheries	4	1·1	12	2·1
5. Co-operation	7	2·0	47	8·3
6. Miscellaneous	1	0·3	9	1·6
II. *Community Development*				
1. National Extension and Community Development	90	25·2	200	35·2
2. Village Panchayats	11	3·1	12	2·1
3. Local Development Works . . .	15	4·2	15	2·6
TOTAL AGRICULTURE AND COMMUNITY DEVELOPMENT	357	100·0	568	100·0

Source : Second Five Year Plan Report.

N.B.—The data have been utilised in Chart V.

APPENDIX V—contd.

6.1 *Indices of Aggregate Consumption of Selected Commodities*

Foodgrains, Sugar, Tea and Cloth

(Base : 1949-50=100)

Year	Foodgrains		Sugar (A)		Tea (B)		Cloth (C)	
	Net availability for consumption		Offtake for consumption		Availability for consumption		Availability for civil consumption	
	Million tons	Index	Lakh tons	Index	Million lbs.	Index	Million yards	Index
1949-50	53·69	100	9·43	100	141	100	4911	100
1950-51	50·08	93	10·81	115	170	121	3478	71
1951-52	49·60	92	11·63	123	201	143	4238	86
1952-53	53·94	101	16·52	175	187	133	5275	107
1953-54	60·89	113	18·07	192	182	129	5566	113
1954-55	59·98	112	17·23	183	167(R)	118	5586	114
1955-56	59·12	110	19·41	206	213*	151	5951	121
1956-57	63·19	118	19·70†	209	N.A.	..	6275	128

R.—Revised.
*Provisional.
†Estimated.
N.A.—Not available.

Source : (A) Directorate of Sugar and Vanaspati, Ministry of Food and Agriculture.

(B) (*i*) Tea in India—1955 Directorate of Economics and Statistics, Ministry of Food and Agriculture, and
(*ii*) Tea Statistics —1956 Tea Board.

(C) Indian Textile Industry—Statistical Bulletin—July 1957—Ministry of Commerce and Industry. (Figures relate to calendar year.)

N.B.—The data have been utilized in Chart VI.

APPENDIX V—*contd.*

6·2 *Index of Sales of Certain Varieties of Vanaspati and Soap*

(Base : 1949-50=100)

Year	Vanaspati		Soap	
	Cheap Quality	Expensive Quality	Cheap Quality	Expensive Quality
1950	117	133	117	107
1951	119	150	138	103
1952	141	153	149	90
1953	157	132	148	78
1954	203	130	154	82
1955	242	126	167	91
1956	231	116	174	100
1957	286*	132*	209*	92*

*Estimated.

N.B.—The data have been utilised in Chart VI.

7. *Production Trends*

(Index Numbers with 1949-50 as Base)

Year	Rice	Wheat	Jowar	Total Cereals	Total Foodgrains	All Agricultural Commodities
1949-50	100·0	100·0	100·0	100·0	100·0	100·0
1950-51	87·9	101·1	89·8	90·3	90·5	95·6
1951-52	90·1	93·9	96·4	91·2	91·1	97·5
1952-53	96·8	112·7	106·6	101·4	101·1	102·0
1953-54	118·6	120·0	117·0	120·1	119·1	114·3
1954-55	105·5	133·7	133·4	114·0	114·4	116·4
1955-56	112·7	130·5	98·5	113·7	113·5	115·9
1956-57	118·1	138·1	110·6	119·4	119·6	123·0

Source : Directorate of Economics and Statistics, Ministry of Food and Agriculture 1956-57 indices are based on Final Estimates and are subject to revision.

N.B.—The data have been utilised in Chart VII.

APPENDIX V—*contd.*

8. *Adjusted Estimates of Production*

Rice ('000 Tons)

Year	Southern Region (a)	Eastern Region (b)
1949-50	5,054	11,101
1950-51	5,110	9,885
1951-52	5,220	9,995
1952-53	4,920	11,262
1953-54	6,927	13,316
1954-55	7,075	9,951
1955-56	7,060	11,298
1956-57	7,392	12,063

(*a*) Southern Region includes the States of Andhra Pradesh, Madras and Mysore.
(*b*) Eastern Region includes the States of Assam, Bihar, Orissa and West Bengal.

Source : Directorate of Economics and Statistics, Ministry of Food and Agricolrure. The figures for 1956-57 are subject to revision.

N. B.—The data have been utilised in Chart VIII.

9. *Adjusted Estimates of Production*

Wheat ('000 Tons)

Year	North West Region*	U. P.
1949-50	1,938	2,585
1950-51	1,857	2,678
1951-52	1,952	2,533
1952-53	2,436	2,824
1953-54	2,402	3,106
1954-55	2,711	3,284
1955-56	2,658	3,041
1956-57	3,304	3,139

*North West Region includes the States of Punjab and Rajasthan.

Source : Directorate of Economics and Statistics, Ministry of Food and Agriculture. The figures for 1956-57 are subject to revision.

N. B.—The data have been utilised in Chart IX.

APPENDIX V—*concld.*

19. *Adjusted Estimates of Production*

Other Cereals

('000 Tons.)

Year	U. P.	Punjab	Bombay
1949-50 . . .	3,937	1,276	4,540
1950-51 . . .	3,991	1,101	3,637
1951-52	4,036	937	4,024
1952-53	4,268	1,409	3,691
1953-54	3,922	1,395	4,870
1954-55	4,494	960	5,306
1955-56	3,425	987	4,113
1956-57	3,775	1,134	4,609

Source : Directorate of Economics and Statistics, Ministry of Food and Agriculture. The figures for 1956-57 are subject to revision.

N. B.—The data have been utilised in Chart X.

APPENDIX VI

1. *All India Index Numbers of Wholesale Prices*

(Base : 1952-53=100)

Year/Month	Cereals.								
	Rice	Wheat	Jowar	Bajra	Barley	Maize	Ragi	Cereals	Pulses
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1955—									
May . . .	74	58	52	67	52	60	59	67	48
June . . .	76	60	55	73	54	63	62	69	50
July . . .	79	67	60	85	62	73	69	75	59
August . .	81	70	59	90	65	75	64	77	57
September . .	81	67	58	77	62	73	66	75	55
October . .	79	71	60	77	62	70	61	75	61
November . .	78	74	63	93	68	77	58	76	69
December . .	76	80	71	99	74	86	57	77	73
1956—									
January . .	77	85	83	98	81	91	60	80	76
February . .	79	85	91	89	84	90	63	82	73
March . .	86	85	102	100	85	97	64	87	77
April . . .	92	79	111	102	76	96	70	89	74

APPENDIX VI—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
May	93	79	112	103	81	93	64	90	73
June	95	82	120	107	88	105	79	95	75
July	97	85	122	117	95	107	82	95	78
August	100	88	125	124	97	108	85	99	81
September	101	87	127	124	97	108	92	99	81
October	100	87	133	130	96	98	91	98	79
November	99	92	136	136	105	104	90	100	84
December	93	94	127	133	108	108	97	97	87
1957—									
January	91	94	119	132	113	111	97	95	86
February	96	97	119	132	114	115	99	100	87
March	97	95	119	130	111	118	99	99	84
April	101	93	124	134	94	118	99	101	84
May	106	90	126	137	98	119	101	103	84
June	107	89	128	138	99	121	102	104	86
July	108	89	128	142	103	127	104	105	87
August	111	89	122	138	103	126	109	106	87
September	108	87	112	125	100	111	112	103	83
October (Week ending 19-10-57)	108	89	113	120	98	103	107	103	83

APPENDIX VI—*contd.*

t. *All India Index Numbers of Wholesale Prices—contd.*

(Base : 1952-53=100)

Year/Month	Groups							
	Food articles	Liquor and tobacco	Fuel, power & lubricants	Industrial raw materials	Manufactures	Intermediate products	Finished products	All commodities
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1955—								
May	82·3	84·4	95·8	93·8	99·0	96·7	99·6	89·4
June	83·7	82·3	95·0	93·3	98·2	97·5	98·4	89·7
July	88·4	82·6	93·8	97·9	98·6	97·4	98·8	92·9
August	87·7	81·0	94·1	97·5	98·9	96·2	99·3	92·5
September	85·3	79·5	94·1	94·5	98·3	96·3	98·6	90·6
October	85·1	80·7	94·3	94·7	98·5	96·9	98·7	90·6
November	86·9	78·8	94·6	98·3	99·7	99·1	99·8	92·4
December	87·5	79·6	94·7	102·2	100·2	102·3	99·9	93·9
1956—								
January	89·4	80·2	95·7	105·6	101·1	105·3	100·4	95·3
February	88·8	79·4	96·0	106·4	101·2	107·2	100·3	95·3
March	92·8	78·7	96·6	109·4	102·9	110·5	101·6	98·1

APPENDIX—VI—*contd.*

	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
April	96·0	78·7	98·1	111·4	102·9	110·0	101·7	100·1
May	96·6	79·5	98·5	114·2	103·0	110·8	101·7	100·9
June	99·0	80·5	98·9	112·9	103·4	109·5	102·4	102·0
July	101·0	84·0	104·8	112·3	104·2	108·5	103·5	103·4
August	105·0	83·1	104·9	116·3	105·5	111·7	104·4	106·4
September	103·6	83·6	104·9	116·8	108·8	111·3	108·5	106·8
October	104·0	85·0	104·9	115·5	108·1	110·1	107·7	106·6
November	106·9	86·7	106·2	118·2	108·2	112·2	107·6	108·6
December	104·8	87·7	107·8	119·4	108·6	113·9	107·8	107·9
1957—								
January	103·2	88·0	107·2	120·3	108·4	113·0	107·7	107·2
February	104·1	87·1	107·2	117·6	107·4	110·9	106·9	106·9
March	102·3	87·2	106·2	117·2	106·2	108·9	105·8	105·6
April	104·3	88·0	107·0	116·7	106·2	108·3	105·8	106·5
May	107·0	90·6	109·5	120·4	107·5	109·3	107·3	109·0
June	109·3	92·3	111·7	121·2	108·5	108·9	108·4	110·7
July	111·3	93·7	114·0	121·6	108·8	108·6	108·8	111·9
August	112·1	92·1	114·7	120·1	108·6	108·2	108·6	112·0
September	108·5	93·7	114·5	115·4	108·6	107·3	108·9	109·5
October . . . . . (Week ending 19-10-57.)	108·0	95·8	114·5	114·5	109·1	106·3	109·5	109·3

APPENDIX VI—*contd.*

2. *All India Index Numbers of Wholesale Prices.—Percentage Variations in Average Prices.*

(Base : 1952-53=100)

Year/Month	Rice	Wheat	Jowar	Bajra	Barley	Maize	Ragi	Cereals	Pulses	Fertilisers	Cotton Manufactures
1	2	3	4	5	6	7	8	9	10	11	12
1953-54 . .	100	93	100	104	95	102	107	97·8	91	97·8	108·3
1954-55 . .	82	75	77	78	69	78	77	79·5	59	86·0	110·2
1955-56 . .	78	72	67	84	67	76	62	75·7	62	86·0	106·7
1956-57 . .	96	88	122	122	98	106	88	96·3	81	86·2	116·4
1957 April . .	101	93	124	134	94	118	99	101·0	84	96·0	116·0
,, May . .	106	90	126	137	98	119	101	103·0	84	96·0	116·0
,, June . .	107	89	128	138	99	121	102	104·0	86	96·0	116·0
,, July . .	108	89	128	142	103	127	104	105·0	87	96·0	117·0
,, August .	111	89	122	138	103	126	109	106·0	87	96·0	117·0
,, September .	108	87	112	125	100	111	112	103·0	83	96·0	117·0
Average for 3 months ending September, 1957.	109	88	121	134	102	121	108	104·6	86	96·0	117·0

APPENDIX VI—*contd.*

Percentage Variation in average Prices for three Months ending September, 1957 over.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1952-53	(+)9·0	(—) 12·0	(+)21·0	(+)34·0	(+)2·0	(+)18·0	(+)8·0	(+)5·7	(—)15·0	(—)4·0	(+)17·0
1953-54	(+)9·0	(—)5·4	(+)21·0	(+)28·8	(+)7·4	(+)18·6	(+)0·9	(+)7·0	(—)5·5	(—)1·8	(+)10·1
1954-55	(+)32·9	(+)17·3	(+)57·1	(+)71·8	(+)47·8	(+)55·1	(+)40·3	(+)31·5	(+)45·8	(+)11·6	(+)6·2
1955-56	(+)39·7	(+)22·2	(+)80·5	(+)59·5	(+)52·2	(+)59·2	(+)74·2	(+)38·1	(+)38·7	(+)11·6	(+)9·7
1956-57	(+)13·5	..	(—)0·9	(+)9·8	(+)4·1	(+)14·1	(+)22·7	(+)8·6	(+)6·2	(+)11·4	(+)0·5
1957 April	(+)7·9	(—)5·4	(—)2·5	..	(+)8·5	(+)2·5	(+)9·1	(+)3·6	(+)2·3	..	(+)0·9
„ May	(+)2·8	(—)2·3	(—)4·0	(—)2·2	(+)4·1	(+)1·7	(+)6·9	(+)1·6	(+)2·3	..	(+)0·9
„ June	(+)1·9	(—)1·2	(—)5·5	(—)2·9	(+)3·0	..	(+)5·9	(+)0·6	..	..	(+)0·9
„ July	(+)0·9	(—)1·2	(—)5·5	(—)5·7	(—)1·0	(—)5·2	(+)3·8	(—)0·4	(—)1·1	..	..
„ August	(+)1·9	(—)1·2	(—)0·9	(—)2·9	(—)1·0	(—)4·0	(—)1·0	(—)1·3	(—)1·1	..	
„ September	(+)0·9	(+)1·1	(+)8·0	(+)7·2	(+)9·0	(+)9·0	(—)4·4	(+)1·6	(+)3·6	..	

APPENDIX VI—*contd.*

2. *All India Index Numbers of Wholesale Prices. Percentage Variations in average Prices.*

(Base : 1952-53 = 100)

Year/Month	Food Articles	Liquor and tobacco	Fuel, power and lubricant	Industrial raw material	Manufactures	Intermediate products	Finished Products	All Commodities
	13	14	15	16	17	18	19	20
1953-54	106·7	98·6	99·1	109·5	98·9	98·4	98·9	104·5
1954-55	94·6	90·6	97·0	101·9	100·6	97·4	101·1	97·4
1955-56	86·5	81·0	95·0	99·1	99·6	100·1	99·6	92·5
1956-57	102·2	84·3	104·1	116·0	106·2	110·9	105·4	105·2
1957 April	104·3	88·0	107·0	116·7	106·2	108·3	105·8	106·5
,, May	107·0	90·6	109·5	120·4	107·5	109·3	107·3	109·0
,, June	109·3	92·3	111·7	121·2	108·5	108·9	108·4	110·7
,, July	111·3	93·7	114·0	121·6	108·8	108·6	108·8	111·9
,, August	112·1	92·1	114·7	120·1	108·5	108·2	108·6	112·0
,, September	108·5	93·7	114·5	115·4	108·6	107·3	108·9	109·5
Average for three Months ending September, 1957.	110·6	93·2	114·4	119·0	108·7	108·0	108·8	111·1

APPENDIX VI—*contd.*

Percentage Variation in average Prices for three Months ending September, 1957 over.

	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
1952-53	(+)10·6	(—)6·8	(+)14·4	(+)19·0	(+)8·7	(+)8·0	(+)8·8	(+)11·1
1953-54	(+)3·7	(—)5·5	(+)15·4	(+)8·7	(+)9·9	(+)9·8	(+)10·0	(+)6·3
1954-55	(+)16·9	(+)2·9	(+)17·9	(+)16·8	(+)8·0	(+)10·9	(+)7·6	(+)14·1
1955-56	(+)27·9	(+)15·1	(+)20·4	(+)20·1	(+)9·1	(+)7·9	(+)9·2	(+)20·1
1956-57	(+)8·2	(+)10·6	(+)9·9	(+)2·6	(+)2·3	(—)2·6	(+)3·2	(+)5·6
1957 April	(+)6·0	(+)5·9	(+)6·9	(+)2·0	(+)2·4	(—)0·3	(+)3·1	(+)4·3
,, May	(+)3·4	(+)2·9	(+)4·5	(—)1·2	(+)1·1	(—)1·2	(+)1·4	(+)1·9
,, June	(+)1·2	(+)1·0	(+)2·4	(—)1·8	(+)0·2	(—)0·8	(+)0·4	(+)0·4
,, July	(—)0·6	(—)0·5	(+)0·3	(—)2·2	(—)0·1	(—)0·6	..	(+)0·7
,, August	(—)1·3	(+)1·2	(—)0·3	(—)0·9	(+)0·1	(—)0·2	(+)0·2	(—)0·8
,, September	(+)2·0	(—)0·5	(—)0·1	(+)3·1	(+)0·1	(+)0·7	(—)0·1	(+)1·4

APPENDIX VI—*contd.*

3. *Rationed Population, Procurement and Imports of Cereals in India.*

Year	Rationed population as on last day of the year ('000 persons)			Procurement ('000 tons)	Imports ('000 tons)
	Statutory	Non-Statutory	Total		
1947	54,038	90,616	144,654	4,079	2,654
1948	27,512	52,895	80,407	2,650	2,841
1949	44,095	75,547	119,642	4,378	3,706
1950	45,723	78,815	124,538	4,617	2,125
1951	46,815	75,161	121,976	3,766	4,725
1952	30,984	87,742	118,726	3,422	3,864
1953	22,706	48,980	71,686	2,061	2,003
1954	13,792	15,005	28,797**	1,407	808
1955	..	..	..	15	700
1956	..	..	..	36	1,420
1957	..	..	..	..	3,716*

**As on 9th July, 1954, on the eve of decontrol of rice.
*Provisional

4. *Stocks and Issues of Cereals*

('000 tons)

Year	Opening Stocks		Total	Issues by Government
	State Government	Central Government		
1947	1,132	..	1,132	7,067
1948	645	..	645	5,130
1949	1,044	..	1,044	7,692
1950	1,581	..	1,581	7,554
1951	729	..	729	7,865
1952	1,309	..	1,309	6,693
1953	1,507	410	1,917	4,525
1954	924	518	1,442	2,120
1955	784	856	1,604	1,610
1956	168	738	906	2,023
1957	79*	208*	287*	3,060*

*Provisional.

APPENDIX VI—*contd.*

5. *Net Imports of Foodgrains into Undivided India.*

(Lakh tons)

Quinquennium	Quinquennial Average. Imports	Exports	Net Imports
1920-21—1924-25	11·4	9·8	1·6
1925-26—1929-30	15·9	8·3	7·6
1930-31—1934-35	18·4	5·7	12·7
1935-36—1939-40	20·7	6·9	13·8

6. *Imports of Cereals into Indian Union*

('000 tons)

Years	Source	Rice	Wheat	Others	Total
1944	P	189	668	71	928
	O	..	615	34	649
	T	189	1,283	105	1,577
1945	P	426	447	55	928
	O	46	804	..	850
	T	472	1,251	55	1,778
1946	P	293	96	—1	388
	O	326	1,345	579	2,250
	T	619	1,441	578	2,638
1947	P	277	75	—28	324
	O	485	853	992	2,330
	T	762	928	964	2,654
1948		867	1,311	663	2,841
1949		767	2,200	739	3,706
1950		353	1,407	465	2,125
1951		749	3,015	961	4,725
1952		722	2,511	631	3,864
1953		175	1,684	144	2,003
1954		603	197	8	808
1955		265	435	..	700
1956		325	1,095	..	1,420
1957		770*	2,946*	..	3,716*

P = From Pakistan.
O = From other countries.
T = Total.
* = Provisional.
Wheat includes wheat flour.

APPENDIX VI—*contd.*

7. *Stocks, Production, etc. of Wheat in U.S.A., Australia and Canada.*

(Million metric tons)

Country	Opening stocks	Production	Exports	Estimated Domestic consumption	Closing stocks
U. S. A.					
1953-54	16·5	31·8	6·0	16·9	25·4
1954-55	25·4	26·8	7·5	16·5	28·2
1955-56	28·2	25·4	9·3	16·2	28·1
1956-57	28·1	27·1	14·5	16·2	24·5
Australia					
1953-54	1·0	5·4	1·9	2·0	2·5
1954-55	2·5	4·6	2·5	2·1	2·5
1955-56	2·5	5·3	2·9	2·6	2·3
1956-57	2·3	3·7	3·3	1·7	1·0
Canada					
1953-54	10·4	16·7	7·8	2·9	16·4
1954-55	16·4	8·4	6·9	4·3	13·6
1955-56	13·6	13·3	7·9	4·3	14·7
1956-57	14·7	14·6	7·1	4·7	17·5

Sources : 1. The State of Food and Agriculture, 1956 and 1957, F.A.O.
2. Monthly Bulletin of Agricultural Economics and Statistics—July-August, 1957—F.A.O.
3. World Grain Trade Statistics 1954-55 and 1955-56 F.A.O.

1 metric ton = 2204·6 lbs.
0·984 long tons.

APPENDIX VI—*contd.*

8. *Rate of Urbanisation*

City	Percentage of "immigrants" to total population, 1954-55	Percentage of "immigrants" from rural areas to total population
(1)	(2)	(3)
Baroda	10·7	4·4
Bhopal	42·4	16·5
Bombay	22·5	10·3
Calcutta	43·6	32·7
Delhi	35·5	11·0
Gorakhpur	30·8	17·6
Hyderabad	14·6	7·2
Jamshedpur	52·2	43·2
Lucknow	10·4	6·2
Madras	24·6	21·4
Surat	5·7	3·2

Note.—Data regarding Bombay, Calcutta, Delhi and Madras cities are not based on complete data. The high rates in Bhopal may be partly due to immigration of a large number of displaced persons.

Source : Research Programmes Committee, Planning Commission.

APPENDIX VI—*contd.*

9. *Productions, Arrivals and Price of Rice in Nizamabad, Mahboobnagar and Warangal Districts of Andhra Pradesh.*

Districts	Year	Total production (Tons)	Total Arrivals in (Tons)	Price Rs. per maund Rs. As.	Change from previous year: Productions Absolute (Tons)	Productions Per cent.	Arrivals Absolute (Tons)	Arrivals Per cent.	Prices Absolute Rs. As.	Prices Per cent.	Arrivals as percentage of production in each year
1	2	3	4	5	6	7	8	9	10	11	12
					Rice						
Nizamabad	1953-54	1,14,972	18,581	16 4	..	..	..	..	..	..	16·2
	1954-55	86,867	30,523	13 12	(—)28,105	(—)24·4	(+)11,942	(+)64·3	(—)2-8	(—)24·0	35·1
	1955-56	99,000	27,401	15 6	(+)12,133	(+)14·0	(—)3,122	(—)10·2	(+)1-10	(+)20·6	27·7
	1955-56 (9 months)	..	23,623	15 3	..	..	..	..	..	..	23·9
	1956-57 (9 months)	1,03,000	25,578	17 14	(+)4,000	(+)4·0	(+)1,955	(+)8·3	(+)2-11	(+)26·2	24·8
			Rice								
Mahboobnagar	1953-54	55,175	14,492	16 11	..	..	..	..	...	..	26·3
	1954-55	66,470	19,195	12 11	(+)11,295	(+)22·3	(+)4,703	(+)32·5	(—)4-0	(—)15·4	28·4
	1955-56	68,000	18,521	15 5	(+)1,530	(+)0·8	(—)674	(—)3·5	(+)2-10	(+)11·8	27·2
	1955-56 (9 months)	..	16,720	14 9	..	..	..	..	..	..	24·6
	1956-57 (9 months)	83,000	22,561	18 6	(+)15,000	(+)22·1	(+)5,841	(+)34·9	(+)3-13	(+)17·6	

APPENDIX VI—*contd.*

1	2	3	4	5	6	7	8	9	10	11	12
			Paddy								
Warangal	1953-54	97,262	15,524	10 11	..	..	..	..	..	..	16·0
	1954-55	62,878	16,103	8 0	(—)34,384	(—)35·4	(+)579	(+)3·7	(—)2-11	(—)25·2	25·6
	1955-56	64,000	19,077	10 3	(+)1,122	(+)1·8	(+)2,974	(+)18·5	(+)2-3	(+)27·4	29·8
	1955-56 (9 months)	..	16,094	9 12	..	..	..	..	..	..	25·1
	1956-57 (9 months)	86,000	14,437	11 15	(+)22,000	(+)34·4	(—)1,657	(—)10·3	(+)2-3	(+)22·5	16·8

APPENDIX VI—*contd.*

10. *Forest Area of India by Regions/States*

Region/State	Geographical area (million hectares)	Forest area (million hectares)	Forest area as percentage of geographical area
(1)	(2)	(3)	(4)
North/North-West India—			
Uttar Pradesh	29·38	4·28	14·6
Rajasthan	33·72	3·39	10·1
Punjab	9·68	1·31	13·6
PEPSU	2·60	0·08	2·9
Jammu and Kashmir	24·03	2·86	11·9
Ajmer	0·62	0·05	7·5
Delhi	0·15	..	0·0
Bilaspur	0·12	0·05	44·2
Himachal Pradesh	2·71	0·93	34·2
East India—			
Bihar	18·21	2·94	16·2
Orissa	15·58	6·09	39·1
West Bengal	7·97	1·08	13·5
Assam	22·02	6·85	31·1
Manipur	2·23	0·60	27·0
Tripura	1·04	0·90	85·8
South India—			
Andhra	16·48	3·79	24·1
Madras	15·63	3·08	19·7
Mysore	8·63	1·37	15·9
Travancore-Cochin	2·37	0·79	34·4
Coorg	0·41	0·29	71·1
West India—			
Bombay	28·82	5·26	18·2
Saurashtra	5·53	0·24	4·3
Kutch	4·40	0·05	1·2

APPENDIX VI—*concld.*

(1)	(2)	(3)	(4)
Central India—			
Madhya Pradesh	33·74	16·16	47·9
Madhya Bharat	12·05	4·33	35·9
Hyderabad	21·28	3·32	15·6
Bhopal	1·78	0·56	31·4
Vindhya Pradesh	6·11	2·00	32·7
Andaman and Nicobar Islands	0·83	0·61	73·5
TOTAL INDIA	328·12	73·26	22·3

1 hectare = 2·47109 acres.

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